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ABSTRACT

The impacted aid program has been controversial since its inception. The Congress has broadened the coverage of the program periodically to the point where it now reaches school districts accounting for half of all public elementary and secondary school enrollement in the United States. In the fiscal 1969 budget, the Administration requested and Congress provided for a study of the impacted areas program. This study is as broad as the legislation itself, reflecting all facets of assistance under P.L. 81-874 and P.L. 81-815. This report presents the results of the study. The study provides an overview of the conclusions and recommendations. The analysis leading to these conclusions and details of the recommended program are presented in the body of the report. The recommended program, if accepted, will be quite simple to administer. (ON)

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FINAL REPORT

on

SCHOOL ASSISTANCE IN FEDERALLY AFFECTED AREAS

A Study of Public Laws 81-874 and 81-815

to

OFFICE OF EDUCATION
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

December, 1969

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DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

by

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December, 1969

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TABLE OF CONTENTS

Page

SUMMARY AND CONCLUSIONS

MAJOR CONCLUSION OF THE REPORT S-1

SUMMARY OF THE RECOMMENDATIONS S-7

IMPACT OF THE RECOMMENDATIONS S-7

A CONCLUDING NOTE S-8

INTRODUCTION

BACKGROUND 1

P. L. 874 (Operation and Maintenance) 1
P. L. 815 (Construction) 2
Controversies Over Impact Aid 2
The Battelle Study 2

CHAPTER 1: A STRATEGY FOR ANALYSIS OF IMPACT AID

INTRODUCTION 1-1

OBJECTIVES OF IMPACT AID 1-1

Providing Good Schools for Federal Pupils 1-1
Offsetting the Economic Burden of Federal Activities on School Districts 1-2
Increasing Federal Support of Elementary and Secondary Education 1-3
Relationships Among Objectives 1-4
Different Objectives as the Source of Conflict Over P. L. 874 1-4

A STRATEGY FOR DEALING WITH THE MULTIPLE OBJECTIVES OF IMPACT AID 1-5

Providing Good Schools for Federal Pupils 1-5
Increasing Federal Support of Elementary and Secondary Education 1-7
Offsetting the Economic Burden of Federal Activities 1-8
The Decision Rules for Design of a Program 1-8

PROGRAM COSTS AND EDUCATIONAL BENEFITS 1-9

Administrative Costs 1-9
Program Costs Used to Increase Educational Inputs 1-10
Program Costs Used to Keep Taxes Low 1-10
Implications of the Analysis of Cost 1-10

OTHER DIMENSIONS OF ANALYSIS 1-11

SUMMARY 1-11

CHAPTER 2: THE ECONOMIC IMPACT OF FEDERAL ACTIVITIES ON SCHOOL SYSTEMS

THE CONCEPT OF NET BURDEN 2-1

Burden on Whom? 2-1
What is Burden? 2-1
The Burden on Impact City 2-1
The Entitlements Formula 2-2
Key Assumptions in the Formula 2-3

TABLE OF CONTENTS
(Continued)

Page

MEASURING THE COST ELEMENT 2-4

Counting Students With and Without Impact 2-4
Measuring the Difference 2-5
Net Burden Counts Related to Current Program 2-6

MEASURING THE REVENUE ELEMENT 2-7

The With and Without Measurement 2-7
The Incremental Measurement 2-8
Summary and Conclusions 2-8

CALCELLING EFFECTS IN THE NET BURDEN FORMULA 2-9

Summary of Cancelling Effects 2-9

THE PROSPECTS FOR A NET BURDEN FORMULA 2-9

Some Propositions for Burden Measurement 2-10
Proposition One: If There Were No Federal Impact, the Tax Base Per Pupil of a District Would be the Same as the Average Tax Base Per Non-Federal Pupil in the United States 2-10
Proposition Two: If There Were No Federal Impact, the Tax Base Per Pupil of a District Would be the Same as the Average Tax Base Per Non-Federal Pupil in the State 2-10
Proposition Three: If There Were No Federal Impact, the Tax Base Per Pupil of a District Would be the Same as the Tax Base for Equivalent Non-Federal Pupils in that District at the Present Time 2-10
Proposition Four: If There Were No Federal Impact, the Tax Base Per Pupil of a District Would be the Same as the Tax Base for Comparable Districts in the Same State 2-11
The Data Problem 2-11

SUMMARY AND CONCLUSIONS 2-12

CHAPTER 3: SOME ALTERNATIVES TO IMPACT AID

THE NO-PROGRAM OPTION 3-1

The Pure Form of the Option 3-1
Consequences of the Pure Form of the Option 3-1
A Modified No-Program Option 3-2

PAYMENTS "IN LIEU OF TAXES" TO SCHOOL SYSTEMS 3-3

The Option and Its Consequences 3-3
Evaluation of the In-Lieu Option 3-4
The Option in Relation to Other Evaluation Criteria 3-4

DIRECT PAYMENTS TO STATE GOVERNMENT 3-5

The Economic Rationale of Payments to States 3-5
Direct Payments to States Viewed as an Education Program 3-6
What Formula Could be Used to Calculate State Payments? 3-7
Indirect Payments to State Government 3-7

SUMMARY AND CONCLUSIONS 3-7

Page

CHAPTER 4: PROBLEMS OF THE PRESENT PROGRAM

INTRODUCTION 4-1

CHARACTERISTICS OF PRESENT IMPACT AID RECIPIENTS 4-1

Major Payments to Districts With Slight Federal Impact 4-2
Some Evidence of Probable Overpayments 4-2

PROBLEMS WITH THE CURRENT PROGRAM IN MISESTIMATING THE NET BURDEN OF FEDERAL INSTALLATIONS 4-3

Case 1: The Federal Government Creates a Wealthy Community 4-4
Case 2: The Federal Government Pays for an Industrial Tax Base That Could Never Exist 4-4
Case 3: The Federal Government Pays for the Deprivation of a Tax Base That Could Never Exist 4-5
Case 4: Taxable Activities on Federal Lands 4-5
Case 5: "GOCO" Facilities 4-5
Case 6: Double Payments 4-6
Case 7: Pupil Loading Differences 4-6
Case 8: The Stationary Child 4-6
Case 9: The Stationary Parent 4-6
Case 10: The Program Underpays on the Basis of Net-Burden Concepts in Some Special Circumstances 4-7

PROBLEMS WITH THE CURRENT PROGRAM IN MISESTIMATING THE PER-PUPIL PAYMENT 4-7

INCOME DISTRIBUTION ASPECTS OF THE PROGRAM 4-8

OTHER PROBLEMS WITH THE CURRENT PROGRAM 4-8

Section 2 Payments 4-9
Grades 13 and 14 4-9
Public Law 874 Provides an Incentive for States to Refuse to Educate Federal Children 4-9
The Program Frustrates State Policies to Equalize Education Opportunities 4-10

ANALYSIS OF P. L. 874 and P. L. 815 IF NOT FULLY FUNDED 4-10

Probable Attitude of the Executive Branch Toward Full Funding 4-10
Consequences of Recommending Budgets to Pay Less-Than-Full Entitlements 4-11
Consequences of Paying Less-Than-Full Entitlements 4-12

CHAPTER SUMMARY 4-14

CHAPTER 5: DEFINING THE FEDERALLY CONNECTED CHILD

INTRODUCTION 5-1

STUDENTS LIVING ON FEDERAL PROPERTY WITH A PARENT WORKING ON FEDERAL PROPERTY 5-1

STUDENTS WHO LIVE ON FEDERAL PROPERTY WITHOUT A PARENT WHO WORKS ON FEDERAL PROPERTY 5-2

TABLE OF CONTENTS
(Continued)

Page

PARENTS WHO LIVE ON PRIVATE PROPERTY BUT WORK ON FEDERAL PROPERTY . . . 5-2

  Should the Students be Counted at All? . . . 5-3
  Problems Relating to the District of Residence . . . 5-4
  The "Working On" Definition . . . 5-6
  Definition of Federal Property . . . 5-7

THE STUDENT COUNT AND ITS ALTERNATIVES . . . 5-8

PROBLEMS WITH THE STUDENT SURVEYS . . . 5-8

  Undercounting . . . 5-8
  Overcounting . . . 5-9

SUMMARY AND CONCLUSIONS . . . 5-10

CHAPTER 6: THE PER PUPIL CONTRIBUTION

PRESENT PRACTICE . . . 6-1

PRESENT LOCAL CONTRIBUTION RATES . . . 6-1

ADMINISTRATIVE PROBLEMS OF THE LOCAL CONTRIBUTION RATE . . . 6-4

THE THEORY OF THE LOCAL CONTRIBUTION RATE . . . 6-6

COMPARING THE CURRENT PROGRAM TO THE THEORY OF THE LOCAL CONTRIBUTION RATE . . . 6-7

  Use of Preceding Years' Data . . . 6-7
  Exclusion of Federal Contributions . . . 6-8
  Exclusion of State Contributions . . . 6-8
  Exclusion of Capital Costs . . . 6-9
  Exclusion of Nonschool Costs of Education . . . 6-9
  Implications of the Comparisons . . . 6-9

DEVELOPING NEW WAYS TO CALCULATE PER PUPIL PAYMENTS . . . 6-10

  Avoiding Per Pupil Payment Calculations . . . 6-10
  Option One: Making Per Pupil Payments by Matching Local Per Pupil Contributions . . . 6-11
  Option Two: Matching the District's Tax Rate Applied to the State Average Tax Base . . . 6-13
  Option Three: A Uniform State Rate . . . 6-14
  Summary of the Options . . . 6-14

MINIMUM PAYMENT PROVISIONS . . . 6-15

  The Need for a Minimum . . . 6-15
  Payment of Minimums to the States . . . 6-16
  Minimum Payment Rates . . . 6-17

SUMMARY . . . 6-18

6

TABLE OF CONTENTS
(Continued)

Page

CHAPTER 7: FURTHER STEPS TOWARD THE PROGRAM

INTRODUCTION 7-1

CONTRIBUTION RATES FOR (b) PUPILS 7-1

- Conceptual Basis for the (b) Payment Rate 7-1
- Measuring the Residential Taxes of Federal Employees 7-3

TREATMENT OF RICH AND POOR DISTRICTS 7-4

ELGIBILITY, ABSORPTION, AND CORRECTIONS FOR THE INHERENT OVERCOUNTING OF STUDENTS 7-5

- Problems With Current Law 7-5
- No Minimum Requirement 7-6
- An Administratively Justified Eligibility Threshold 7-7
- A Budget-Justified Absorption 7-7
- Absorption and Eligibility Based Upon Exceeding National Averages 7-8
- Absorption Based Upon Economic Logic 7-10
- Absorption Related to Overcounting of Students 7-11

POSTAL EMPLOYEES 7-13

SUMMARY AND CONCLUSIONS 7-13

CHAPTER 8: SOME SPECIAL ISSUES

CAPITAL CONTRIBUTIONS 8-1

- Problems With P. L. 815 8-1
- Solving the P. L. 815 Problems 8-1
- The Contract Payment District 8-2
- Other Recipient Districts 8-2
- Avoiding Double Payments 8-4
- Costs of the Approach 8-5

STATE AID AND THE OFFSET OF IMPACT AID FUNDS 8-6

- Background 8-6
- Relationship of Equalization Programs and Impact Aid 8-7
- A Standard Form State Equalization Formula 8-7
- The Effect of Preventing Offset 8-8
- An Example of the Problem 8-8
- The Solution 8-10

THE IMPACT AID PROGRAM AND INDIAN EDUCATION 8-11

- The Indian Education Situation 8-11
- Problems With Impact Aid 8-12
- Public Law 815 8-12
- Recommendations 8-13

CONTRASTS BETWEEN IMPACT AID AND OTHER FEDERAL EDUCATION PROGRAMS 8-14

IMPACT AID AND SCHOOL CONSOLIDATION 8-15

EARMARKING FUNDS 8-16

(7)

TABLE OF CONTENTS
(Continued)

Page

CHAPTER 9: THE ISSUE OF PUBLIC HOUSING STUDENTS

BACKGROUND . . . 9-1

ANALYSIS OF BURDEN . . . 9-1

Impact on Revenues . . . 9-3
Conclusion . . . 9-4

OTHER REASONS TO INCLUDE PUBLIC HOUSING . . . 9-4

Aiding Disadvantaged Children . . . 9-5
Aiding Large Cities . . . 9-5
Effect on Impacted Districts . . . 9-7
Effect on Housing Policies . . . 9-7

SUMMARY . . . 9-8

CHAPTER 10: THE RECOMMENDED PROGRAM

INTRODUCTION . . . 10-1

THE RECOMMENDED PROGRAM . . . 10-1

Section 1: Declaration of Policy . . . 10-1
Section 2: Eligibility for Assistance . . . 10-1
Section 3: Assistance to Certain Heavily Impacted Districts . . . 10-5
Section 4: Amount of Assistance . . . 10-10
Section 5: Payments to Certain States . . . 10-12
Section 6: Assistance in Special Cases . . . 10-13
Section 7: Authority for Advance Commitments in Certain Cases . . . 10-15
Section 8: Children for Whom Local Agencies are Unable to Provide Education . . . 10-15
Section 9: Administrative Provisions . . . 10-17
Section 10: Transition Provisions and Related Problems . . . 10-18
Section 11: Definitions . . . 10-20

THE PROBLEM OF THE FLOATING PARAMETERS . . . 10-21

The Research-Based Parameters . . . 10-21
The Judgment-Based Parameters . . . 10-22

THE NEED FOR FURTHER STUDY . . . 10-22

APPENDIX A

COMMENTS OF SCHOOL OFFICIALS ON IMPACT AID . . . A-1

APPENDIX B

SOME TECHNICAL ISSUES IN A FORMULA THAT USES TAX RATE AND TAX BASE TO DETERMINE PAYMENTS . . . B-1

APPENDIX C

SAMPLE APPLICATION FORMS AND INFORMATION ON THE COSTS AND ADMINISTRATION OF THE RECOMMENDED PROGRAM . . . C-1

SUMMARY AND CONCLUSIONS

Since 1950, the federal government has provided a program of assistance to local educational agencies in areas affected by federal installations. This program provides both for construction of new facilities (P.L. 81-815) and for operating costs (P.L. 81-874). Payments for operating costs are based upon the number of students with parents working on, and/or living on, federal property times a rate of payment designed to reflect either the local educational costs per pupil of comparable districts within the same state or one-half of the national or state average per pupil costs. The payments for construction are made primarily for the construction of facilities to meet increases in federally connected students. Total program costs, assuming full entitlements were paid, would exceed $700 million in fiscal 1971. Recent amendments to the legislation have included children living in low-cost federally sponsored housing projects within the program. If provision were made for these children the total costs of impact aid would exceed $1 billion annually.

The impact aid program has been controversial since its beginning. Many observers argue that the program provides a double benefit to communities with federal installations: one set of benefits occurring because the installation stimulates employment and economic growth and another because the federal government makes special payments of school costs. Accepting this argument and others, Presidents (from both parties) have recommended substantial restructuring and curtailment of the present program. Despite these recommendations, the Congress has broadened the coverage of the program periodically to the point where it now reaches school districts accounting for half of all public elementary and secondary school enrollment in the United States.

In the fiscal 1969 budget, the Administration requested and Congress provided for a study of the impacted areas program. After competitive bidding, Battelle Memorial Institute's Columbus Laboratories was selected to perform the study. The study was as broad as the legislation itself, reflecting all facets of assistance under P.L. 81-874 and P.L. 81-815 *excepting the provisions relating to natural disasters*. The results of the study are presented in this report. This summary provides an overview of the conclusions and recommendations. The analysis leading to these conclusions and details of the recommended program are presented in the body of the report.

MAJOR CONCLUSIONS OF THE REPORT

(1) The federal government should continue to provide a program of school assistance in federally affected areas. Particularly in small local areas surrounding a major military installation, it is both inequitable and unrealistic to expect local taxpayers to provide for the education of children brought into the community by the federal government under circumstances where the community cannot collect significant tax revenues from either the federal government or its employees. In some cases these children receive their education from schools administered directly by the federal government and financed by impact aid. In other cases these children are educated by local educational authorities through a combination of local and state funds and federal impact aid funds. In many of these cases if the federal program were terminated, the children would receive no education at all; in other cases, the quality of education available would be severely reduced with serious consequences for the federal government's attempts to recruit employees to such areas and for the quality of education generally. No other federal educational program reaches the local educational agencies educating large numbers of federally connected children to a significant degree and it is unrealistic to expect state governments to assume the full costs of educating these children.

(2) The basic features of the current program are sound. The basic mechanism of the current program, namely counting the federally connected students in a district, calculating a per pupil payment for the district and multiplying the number of students by the rate of payment, is sound. It is capable of providing a reasonable approximation of the federal impact upon a district, and is relatively simple to administer by comparison to alternative methods considered.

(3) The current program undercompensates a few districts. Even when Congress appropriates enough to pay all that the current formulas indicate should be paid, some districts are underpaid in relation to the costs of educating the federally connected pupils to whom they provide education. These underpayments stem primarily from payment rates based upon costs existing two years preceding the year for which the payment is made.

(4) The current program overcompensates many districts. Current impact aid payments result in unjustified payments to many districts throughout the United States. The major sources of these windfalls are:

... payments that far exeed the costs to the local government of educating federal pupils

... payments to districts that, even without the federal assistance, are wealthy and well able to support schools from their local sources with a lower tax effort than most districts in the state, and which frequently became wealthy as a result of federal activities

... payments to districts based upon the non-taxability of federal property where the federal installation or activity on federal property (e.g., an aircraft company operating in a government-owned plant, or an oil well on public lands) generates taxes sufficient to defray the education costs of the children of persons working on the property

... double payments to districts that receive funds through in-lieu-of-tax payments or shared revenues and again through impact aid. Some of these districts use the revenues to add to their cash reserves and to reduce school taxes

... double payments to districts that receive funds from their state government on an equalization formula (that by federal law cannot take the federal payments into account) and from the federal government for federal impact (under a formula that does not take the state payments into account)

... higher per pupil payments to rich districts than to poor ones resulting from the methods used to calculate the rate of payment

... payments based upon children who would likely be attending schools in the district even if the federal government had never come into the district

... payments that never reflect the economic stimulus that the federal government may cause in a community.

The extent of overpayment is indicated by the following general characteristics of districts with a relatively large percentage of federally connected students by comparison to districts with a lighter federal impact or no impact at all. The heavily impacted districts tend to have:

... A lower ratio of pupils to teachers

... Higher per pupil expenditures

... Lower tax rates.

The effect of impact aid upon many – but not all – of these districts is to allow them to maintain a better level of education with less local effort.

(5) A new formula that perfectly reflects the economic burden of federal installations upon local schools cannot be devised. While it is possible to pinpoint extreme cases of overpayments and underpayments to local districts, no formula can ever be developed that precisely calculates payments upon the basis of net economic burden of federal installations on local schools. This conclusion follows from the fact that there is no reliable way to determine what a community would have been like had the federal government never established an installation in it. Existing economic knowledge and present economic data simply do not provide the adequate basis for correct speculation on, for example, the revenue position of Washington, D.C., area schools in the event that the nation's capital had remained in Pennsylvania rather than being transferred to Washington, D.C.

(6) A new formula for impact aid can be devised that will make the federal payments more closely correspond to the net burden of federal installations upon local schools. While no perfect formula can be devised, it is possible to improve substantially upon the present program by a series of changes that are described in detail below.

(7) Certain students that now are a basis for federal payments should be excluded. The major categories of such students are:

(10)

... students in grades 13 and 14 that are now a basis for payments primarily in one state (California), but not others.

... students whose parents would work on tax-exempt property even if they did not work on federal property

... students whose parents work in a place that makes substantial tax payments should only be counted for federal aid purposes if the tax payments are deducted from the federal payments to be made.

(8) Elegibility requirements should be tightened. The current eligibility standard is so low that it includes many districts that would be better off if impact aid were abolished and the funds used to provide assistance throughout the United States on a flat per pupil grant basis or through revenue sharing. Some of these districts have serious educational finance problems; many do not. In the lightly impacted districts, these problems are not caused by federal impact and cannot readily be cured by the indirect approach of providing assistance based upon counting federal pupils.

Both the current legislation and Battelle's recommendations recognize that the burden of a school system from a pupil who lives and whose parent works on federal property is greater than a pupil whose parent works on federal property but lives on private property on which the school system levies taxes.* This different burden is not reflected in the method for calculating eligibility; it should be.

The most appropriate eligibility threshold would be to provide assistance only to districts that had a federal impact above the national average federal impact.

(9) Some payments should continue to be made on 3(b) students, whether living in the same school district as the property upon which the parent works or not. Under some circumstances school districts are burdened substantially through assuming responsibility to educate the children of federal employees who live in private (taxpaying) homes and apartments within the school districts. This burden exists whether or not the property upon which the parent works is located within or outside the school district educating the child.

(10) Payments should be reduced on 3(b) students. The current student count procedures include as 3(b) students every student who has one parent working on federal property. While different student count methods are not recommended, it is clear that the current and recommended count procedures substantially overstate the burden of the federal government on local school districts. This overcompensation stems from the following major sources (and a number of minor sources discussed in the report):

... a student is counted as federally connected even when the primary wage earner in the family works on private property. For example, if the primary wage earner is a private accountant at a firm in Washington, D. C., area but the secondary wage earner (wife) happens to work as a secretary for a government agency, any children are counted as federally connected even though the major place of employment (the father's accounting firm) is taxable.

... the counting of (b) students occurs even in districts that could not conveivably tax the parent's place of employment — a situation that arises in any residential suburban district.

... the (b) student counts include many students who would reside in the district even if the parent were not employed by the federal government.

... the (b) student count is asymmetric, that is, the movement of a student to a school district is counted as a loss for the receiving school district, but not as a gain for the district that no longer has to educate the pupil.

... finally, the most important, the student count procedure fails to recognize that the incomes of the parents of (b) students in many (but not all) cases may stimulate increases in economic activity and taxable wealth in the district that (combined with the taxes paid on the residence) will offset the costs of the additional children in the district.

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* Students whose parents work on federal property but live on private property are covered by Section 3(b) of P. L. 81-874. They are called 3(b) students — a convention followed in this report.

11

Battelle has devised three basic ways to compensate for the overcounting of the 3(b) students. These methods consist of

(1) Absorption: paying only for those students in a school district that exceed the average impact of federal students on all districts. This principle would, in effect, say that a school district must bear the responsibility of educating a certain percentage of federal students and the federal government will bear the responsibility only for the remainder.

(2) Alterations in Rate of Payment: changing the payment rate for (b) pupils from the current rate of one-half the payments of (a) pupils to some lesser fraction

(3) Richness Cut-Offs: reducing or eliminating the payments to districts with a high tax base per pupil on the grounds that the federal impact must have been positive rather than a burden upon such districts, or that even if the district has had an adverse federal impact it can provide quality education from its own tax sources.

These three methods may be put together in differing combinations to produce differing impacts upon payments for (b) (and in some cases) (a) pupils. Absorption tends to make the payment per (b) pupil highest in the heavily impacted districts and lowest in the lowest impacted districts. Changing the rate of payment for (b) pupils tends to have its effects in direct proportion to the number of (b) pupils, regardless of the wealth of the district or the percentage of its pupils that are federally connected. Taking the district's tax base into account tends to reduce payments most in the districts that have very high tax base and to have no effects on payments (or increase them) in districts with a very low tax base. While a variety of desirable options could be developed using these factors, the one outlined below appears to be a reasonable combination of the various methods of bringing the present program into line with the economic impact of federal installations.

(11) Federal payments should be made only on those students that represent above average federal impact. The eligibility and payments threshholds should be made consistent by requiring each district to subtract from its total claimed federally connected students the number of students that represent 3 percent of the non-federal students. This change will mean that the federal government is paying only for those students that represent an above average federal impact.

(12) The payments for (b) pupils should be 40 percent of the payments for (a) pupils. The current program pays 50 percent of the (a) payments for the (b) pupils. This relationship was based upon then current (1950) data indicating that roughly 50 percent of the property tax revenues in the United States tended to come from taxes upon the place of residence and the other 50 percent from commercial and industrial property. More recent data indicates that on a national average basis more like 60 percent of property tax revenues come from the places of residence.

(13) Payments should not be made to districts that are substantially better off in educational finance than state averages. Currently a significant proportion of P. L. 875 payments are made to districts that are considerably better off than many other districts in the same state that do not receive impact aid assistance. In such districts the federal funds tend to (1) cause the district to lower local taxes and at the same time enjoy education considerably better than state averages or (2) cause the district to enjoy a standard of education substantially above the state average – a situation that is less desirable than using the same federal funds to pay some of the poorest districts rather than the richest.

Battelle recommends that no assistance under the impact aid program be provided to any district that has a tax base per pupil that is more than 25 percent better than the average in the state. Districts receiving assistance would be limited to receiving assistance that placed them in a position comparable to that of other districts in the state having 25 percent more than the state average tax base.

(14) Per pupil payments should be based upon the local tax effort of the recipient. In general, the current methods for calculating the per pupil payments tend to reward richer districts and penalize poorer ones. Battelle's recommended per pupil payment calculation is developed by taking the actual tax rate of the recipient district and applying it to the state average tax base per pupil. This means that the federal payment would be proportional to the district's own willingness to tax itself, but independent of the wealth of the district.

The effect of this recommendation is to supply to each district a standard tax base behind each federally connected child, but to allow each district to make its own decisions on what tax rate to apply to that tax base. Local taxpayers could increase the federal payment rate by increasing their own taxes; but would find that federal effort would be reduced if they reduced their own taxes.

(15) A minimum local contribution rate should be paid. Implementation of the above proposed method of calculating per pupil payments would cause very low (e.g., as low as $40-$80 per pupil) rates in the states that defray a large proportion of their educational costs through state rather than local taxes. A very strong case can be made that it is inequitable to make such low payments in a particular state merely because it chooses to defray a large proportion of its educational costs through state funds. To avoid this problem, current legislation permits a district to use an alternative approach to calculating its local contribution rate – namely to use one-half of the national or state average of per pupil costs. The Battelle proposal accepts the equalizing aspects and fiscal neutrality of the one-half national average. However, the difference between the minimum payment and the locally developed rate should be paid to the jurisdiction that earned it – namely the state. This will avoid making major windfall payments to particular districts and at the same time promote a situation where the per pupil payments are more equitable among the states.

(16) Special ground rules should be established for very heavily impacted districts. Under current law, the Commissioner of Education may make payments in excess of those determined under the current formula to districts that have more than 50 percent of their students who reside, and whose parents work, on federal property. Because of the relatively high entitlements of such districts under current law, this special provision is not widely used.

The authority conferred by this provision should be extended to all districts having more than 50 percent of their enrollment composed of equivalent federal pupils (counting (b) students as a 40 percent federal responsibility and a 60 percent local responsibility). Acting under this special authority the federal government determines the funds necessary to sustain a reasonable standard of education in the district, and pays the difference between that amount and what is available from state government and a reasonable level of local taxes. Safeguards are recommended to insure that this authority does not result in the reduction of local tax effort or state aid.

(17) Assistance for Capital Costs should be provided on the same basis as Operating Costs. Serious problems associated with the current P. L. 81-815 program stem primarily from the fact that the program is not set up on a basis similar to that of P. L. 81-874. The easiest and most equitable way to correct this problem is to put capital cost assistance on the same basis as operating cost assistance. Such assistance would be provided on a negotiated, project-by-project basis in those few districts having more than 50 percent of their enrollment federally connected. In other recipient districts a capital contribution would be made on the same basis as the operating costs contribution.

(18) Public housing should not be blanketed into the impacted aid. Viewed in the context of federal impacts on local communities, no satisfactory rationale can be developed for including public housing pupils in the impacted areas program on the basis of economic effects of public housing. If inclusion of public housing is considered as a way to channel federal funds into large city education, the program would establish new inequities among large cities and be inferior to a program aiding large cities more directly either by targeting assistance toward large cities, or targeting assistance toward disadvantaged pupils. Payments for public housing pupils under the current impact aid formula would exceed by a wide margin any revenues lost by school districts because the public housing units are not taxable.

(19) The federal government should get out of the business of operating elementary and secondary schools in the United States. The above recommendation is not new – it has been federal policy for decades. Unfortunately, the policy has never been completely implemented for a variety of reasons discussed in the report, with the result that the federal government (through the Defense Department) still runs schools in such locations as Quantico, Virginia; Fort Campbell, Kentucky; West Point, New York; and about a dozen other places. These schools are financed through impact aid that is channeled to the military departments that run the schools. The detailed recommendations in the report provide a mechanism for the federal government to complete the turnover of these schools to local educational authorities.

(20) The Commissioner of Education should be given increased authority to deal on a case-by-case basis with special impact situations. P. L. 874 has little known special provisions to deal with circumstances where the federal government removes a significant portion of a school district's tax base, where there is a sudden increase in federally connected pupils and where there is an unanticipated decrease in federally connected students. Current legislation also provides for gradual phase out of assistance to a district that is eligible in one year but not in the following year and gives the Commissioner of Education authority to waive certain provisions of the legislation under special circumstances. It is recommended that these special provisions – that as often as not result in economically unjustified payments – be dropped in favor of a broader authority (with a limited appropriation) for the Commissioner to act in

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circumstances where a burden is created that does not fall within one of the assistance categories established by the recommended legislation.

(22) The use of impact aid as a tool for dealing with Indian Education problems should be continued, until a better approach to the Indian Education problem can be devised. Impact aid funds are paid to districts that educate Indian children living on reservations through the mechanism of considering such reservations as federal property. This mechanism works to provide substantial federal funding to districts educating Indian children, and is recommended to be continued for that purpose. At the same time it must be recognized that impact aid has not been successful in solving the substantial and unique problems of providing education to the nation's Indian population. By any reasonable standard, Indian education in the United States can be improved substantially and should be, but impact aid (which is necessarily primarily designed for school districts serving children from major federal installations) is probably not the perfect tool for this purpose. However, in the absence of a better approach, continuation of impact aid for districts serving Indian children is recommended.

(23) Present administrative procedures for the program are essentially sound. Battelle's extensive sounding out of school districts indicates clearly that impact aid is by far the most popular federal education program. Procedures for applying for assistance are relatively simple, the program is considered by recipient districts to be very well administered, no strings are attached to how assistance is used, and practically no reports on the uses of funds are required. The major administrative objections to the current program involve delay in payments and uncertainty about the amount of payment to be forthcoming. These problems are largely inherent in the past and current major differences between Administration recommendations and Congressional decisions upon funding for the program. The largest single administrative improvement in impact aid would occur if the Congress and the Executive Branch could get together on a mutually acceptable impact aid program – which program would not make a great deal of difference. Battelle's recommended program would, if accepted, be quite simple to administer.

SUMMARY OF THE RECOMMENDATIONS

In the summary, the recommended program provides for*

... special negotiated payments for districts with more than 50 percent of their students federally connected (counting the (b) students as 40 percent a federal responsibility);

... student counts similar to the present ones;

... local responsibility for federally connected students representing 3 percent of non-federally connected enrollment, and thus no payments for any student representing less than national average federal impact;

... a per pupil payment based upon placing the state average tax base per pupil behind each federal pupil and applying the same tax rate for federal pupils as the district applies to its own taxpayers;

... a cut-off of districts that already have a tax base per pupil that is 25 percent above state average per pupil tax base;

... deductions of federal in-lieu-of-tax payments, shared revenues and tax payments of government-owned, contractor-operated facilities when these payments are significant enough to justify the administrative costs of deducting them;

... a merging of capital cost (P. L. 815) and operating cost (P. L. 874) programs with a resulting increase in federal responsibility for capital costs; and

... a national minimum per pupil payment with the difference between the local contribution rate earned by the district and the national minimum being paid to the states.

IMPACT OF THE RECOMMENDATIONS

By comparison to a continuation of P. L. 815 and P. L. 874 (with full entitlements being paid) the proposed program would pay less to many districts, and represent less total federal budget cost. How much less will vary substantially from district to district, and in some cases the proposed program would pay more than the current program.

The extent to which the current impact aid recipients would be affected by the proposed program will depend upon a number of factors. In general,

... the lesser the federal impact (measured as the percentage of students that are federally connected), the greater the reduction in assistance under the recommended program;

... the higher the proportion of educational costs that are financed locally, the less the reduction in assistance under the recommended program;

... the higher the tax rate, the lesser the reduction in assistance by comparison with current entitlements;

... the richer the district, the greater the reduction in entitlements by comparison with current entitlements.

By comparison to the present program (with full entitlements being paid), the major gainers from the recommended program are:

... the non-impacted poorer districts in the states that provide for a large proportion of education costs through state funds, as these districts are the likely beneficiaries of the minimum payments made to states.

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* More complete detail will be found in Chapter 10.

... the non-impacted or lightly impacted districts that would benefit from the redirection of federal education funds from unnecessary impact aid payments to other federal education programs

... the federal taxpayers who would benefit if, for some reason, the reduced cost of impact aid could not be translated into some other federal education program.

The most likely consequence of continuing the present P. L. 874 and P. L. 815 programs in their present form is that less-than-full entitlements would be paid. Compared to this situation, many heavily impacted districts would find themselves better off under the recommended program than under the current one.

Although there are some uncertainties inherent in the estimate, the costs of the recommended program are not likely to exceed $400 million in fiscal 1971.

A CONCLUDING NOTE

One concluding caveat is in order. This report results from the United States Office of Education turning to a group of researchers concerned with educational finance and asking, in substance, "What is the impact of federal installations upon local school systems and what should the federal government do about it?" This report is directed toward providing an economically, educationally, and administratively reasonable answer to those questions.

What this report explicitly does not do is take a position on what the aggregate spending for federal assistance to elementary and secondary education should be. Our recommendation that an impact aid program be adopted that would cost about $400 million rather than, say, $1500 milion for a program reflecting higher local contribution rates, postal employees, public housing children, and higher minimum payments is not a recommendation that the federal government should spend $1. 1 billion less on elementary and secondary education. Our recommendations simply indicate that if the federal government can spend such sums upon elementary and secondary education, it can use those funds more effectively through other expenditures on education (such as a no-strings-attached federal per pupil grant or revenue sharing) than through impact aid in excess of the program recommended by this report.

As is to be expected as a result of any report that suggests that some $300 million of federal grants are unnecessary, this report is bound to be controversial.

Much of the controversy will be based upon a disagreement with the framework of the study, rather than with the conclusions of the study given the framework in which it was developed. Many readers of this report will believe that the current impact aid program is the only available way to pry funds out of federal government for the support of schools in their district. Such individuals will argue that while Battelle (or other similar institutions) may be able to design better ways to use federal educational funds, the real alternatives for the next several years for many school systems (e. g., those in large cities) will be the impact aid program currently in effect or no assistance at all. To such individuals this report will seem relevant in the context in which it is written ("What is a good impact aid program to compensate for the burdens of federal installations?") but irrelevant to the question they perceive to be relevant ("How do we get more federal tax money into elementary and secondary education?" or "How do I finance an adequate program of education in my school district?"). However, these questions are as important to districts that do not get impact aid funds as they are to those that do.

The reason that we have recommended a program that results in less assistance for many current P. L. 874 recipients is related to the economics of federal impact on those districts. This is not to say that these districts don't "need" the money or are not using it wisely. It is to say that if educational programs are to be directed to areas of greatest financial need, many current P. L. 874 recipients would not be among the recipients and many non-impacted districts would be. The implication of these recommendations for many districts may well be a choice between higher tax rates or a reduction in educational expenditures from, say $650 a pupil to $620 a pupil. Unquestionably, such a change has educational impacts, but given our assumption of constant federal dollars for education, those impacts are not as severe as the continuation of a high tax effort and per pupil expenditures of $400 a pupil in a district that does not share in impact aid funds. So long as educational funds are limited, the price the nation pays for overpayments to districts showing a limited federal impact is underpayments or no payments to districts that have a legitimate claim on the nation's educational resources, but which cannot base that claim on federally connected children.

INTRODUCTION

BACKGROUND

In 1950 Congress enacted Public Laws 81-874 and 81-815 to deal with the problems of schools in areas affected by federal activities. These federal assistance programs are commonly called the impacted areas program, impact aid, or school assistance in federally affected areas. These laws were based upon extensive hearings and investigation which tended to show that the federal government had placed a major burden on some school systems. This burden was the result of an influx of federally connected students without a corresponding increase in the revenues available to the school systems responsible for educating them.

Since 1950, both P.L. 81-874 and P.L. 81-815 have been broadened to make more school systems eligible for assistance and to increase the rate of payment in certain cases. These changes coupled with the natural growth in educational costs have caused the cost of full payments to rise to over one billion dollars in fiscal 1971, assuming that legislation to include public housing children in the P.L. 81-874 is implemented. If fully funded, this program would represent the second largest program of federal assistance to elementary and secondary education and would defray over 2 percent of all elementary and secondary education expenditures in the United States. The program currently reaches over one-fourth of the school districts in the United States. These assisted districts educate over one-half of all elementary and secondary public school students.

P.L. 874 (Operation and Maintenance)

Section 3 of P.L. 874 is the major provider of assistance. Under this section a school district* is eligible for assistance if it has a minimum of either 3 percent of its pupils or 400 pupils who are federally connected. At least 10 pupils must be federally connected to create eligibility. Federally connected pupils are defined as those pupils whose parents reside on federal property and work on federal property, (3(a) pupils); those whose parents reside on federal property but do not work on federal propproperty (3(b) (1) pupils); and those whose parents reside on privately owned property but work on federal property (3(b) (2) pupils). Students whose parents are in the uniformed services also create eligibility (3(b) (3) pupils). School districts may also be eligible for assistance on the basis of major removals of land from tax base by federal action [Section 2(a)], sudden increases in attendance as a result of federal action (Section 4), or where a military department runs its own schools because no public school system provides suitable free public education (Section 6). Districts, whether or not they have federally connected students, can also become eligible for P. L. 874 assistance in the event of a major disaster (Section 7), but the disaster assistance provisions of the law are outside the scope of the present study.

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*This report adopts a number of conventions for the purpose of improving the ease with which it can be read. These conventions are listed below.

Free public education in the United States is provided by a variety of legal entities called "local educational agencies" under current law. These include independent school districts, school systems run through town or county government (dependent districts) and occasional systems managed directly by state government. For simplicity, all these entities are called school districts in this report.

The terms "pupil", "child", and "student" are used interchangeably in this report, except in the recommendations where different methods of counting students (e.g., average daily membership, average daily attendance) assume significance in affecting the amount of payments.

The terms "federally connected student" and "federal student" are used interchangeably to indicate students who would be defined as federally connected for the purposes of making payments under an impact aid program.

The terms "heavily impacted" and "lightly impacted" are used to indicate the degree to which the federal government has affected a district as measured by the proportion of students that are federally connected.

Local school taxes are discussed as though they were all property taxes with rates measured by mills per dollar of assessed value. Actually, many school systems receive revenues from other types of taxes, or express their tax rates in other ways.

School tax rates are set by a variety of methods ranging from town meetings and local elections to decisions by an elected board of education, city council or county commissioners. The discussion treats all tax rates as though they were determined directly by voters.

None of these conventions affect the analysis in the report; they simply provide a shorthand method of expressing the various ways in which states choose to organize and finance elementary and secondary education.

The amount of assistance to a school district is derived by multiplying the number of federally connected pupils by a local contribution rate. On the theory that either the residence of the child or the place of the parent's employment is taxable property, the local contribution rate for 3(b) pupils is half the rate for 3(a) pupils. The local contribution rate is determined by consideration of the per pupil locally raised revenues of "comparable" districts in the same state as the applicant district. Alternatively the rate may be determined by consideration of the per pupil locally raised revenues in the same "grouping" of districts as the applicant. The minimum local contribution rate is set at the greater of one-half of the national or state average of per pupil costs. All these local contribution rate calculations consider only operating costs and are based upon calculations of situations prevailing two years before the year in which the federal payment is to be made.

School districts make application for funds under the program by making acutal counts (surveys) of federally connected students each year. Applications from school districts are routed through state department of education to the U. S. Office of Education. Because the formula for P. L. 874 payments does not allow discretion in the allocation of funds, the primary Office of Education review functions involve such questions as whether the federally connected students were propertly counted, whether the comparable districts or state groupings were properly chosen, and how fast payments can be made.

P. L. 815 (Construction)

To establish eligibility under P. L. 815 a school district must show a stipulated increase in both federally connected students and in total students. Assistance is determined by multiplying the number of students upon which payments are based by minimum standard construction costs per student for the state in which the district is located. Special provisions of P. L. 815 deal with Indian problems, temporary federal impacts, schools managed by military departments, and disaster assistance. Unlike P. L. 874, P. L. 815 requires applications on a project-by-project basis.

Controversies Over Impact Aid

The impact aid program has always been controversial. Its strongest supporters contend that it is the most effective of all federal educational programs and that its payments represent the minimum required for the federal government to carry its fair share of the costs of educating children of federal employees. Its strongest opponents contend that the program constitutes a kind of educational pork barrel that allows areas that are benefited by the location of federal installations to collect an additional benefit in the form of impact aid.

Controversies over impact aid have tended to develop an annual pattern. Presidents, both Republican and Democratic, have annually proposed changes in the program that would cut the program's costs substantially; affected districts have testified that the changes proposed would cause sharp cutbacks in their educational programs; and the Congress has appropriated approximately the amounts required to pay full entitlements under the program. This process has been unacceptable to all concerned. For the school districts it has meant uncertainty in planning and has forced them into politics to a degree many school leaders do not desire. More recently it has resulted in payments below full entitlements. For the Executive Branch, it has meant consistent Congressional disapproval of the President's budget recommendations and uncertainty about total budgets for elementary and secondary education. For the Congress, these differences of opinion have consumed considerable Congressional time and effort without providing a resolution of the situation good for more than one year.

The Battelle Study

Pursuant to its responsibilities for federal educational policy, the Office of Education in early 1968 requested Congressional approval of, and funding for, a major study of this legislation. This study was contracted to an outside research organization in the hope that such an organization – which would not be immersed in day-to-day administration of the program and would have no vested interest in the outcome of the study – would be able to delve into basic economic issues about the impact of federal installations and develop a program that made both educational and economic sense. In January, 1969, the Office of Education contracted with the Columbus Laboratories of Battelle Memorial Institute (the world's largest not-for-profit research organization) to conduct the study.

Battelle's study included a comprehensive review of the economic impact of federal installations. Questionnaires were sent to over 4,500 school districts, interviews were held with officials in over half the states, and discussions were held with both local school officials and national organizations and agencies affected by the P.L. 874 and P.L. 815 programs. Battelle gratefully acknowledges the cooperation of the many local, state, and federal officials who made this study possible. We regret that neither the time nor the funds available for the conduct of the study permitted us to visit all of the hundreds of local and state school officials who expressed interest in such visits. Likewise, we would have preferred to have had both the time and the permission to circulate drafts of the report to the many individuals who expressed an interest in reviewing and commenting on them. Despite these omissions, we believe that our personal and telephone discussions of the program with over one hundred different school officials has provided us with a good indication of the problems of those with whom we did not have the opportunity to discuss the program.

Throughout this study, Congressional staff members, the Office of Education, other federal agencies, and the states and local districts affected have stressed the importance of action-oriented recommendations, rather than the preparation of "still another study". Battelle has sought to be responsive to the need to produce something more than an academic exercise. The size and organization of this report reflect this orientation. This report is intended to stand alone as Battelle's final report, but to keep it within readable length considerable statistical materials and details of analysis have been provided to the Office of Education as special working papers, rather than as parts of this report. In addition, Battelle has made available to the Office of Education the input data and computer programs used to calculate the financial impact of various programs for impacted areas on both the federal budget and particular school districts.

The report begins with an analysis of the objectives of impact aid and the framework in which analysis of alternative program concepts should take place. Next the economic impact of federal activities upon local schools is considered. Both the current program and alternatives to it are then examined in light of program objectives and the findings on economic impact. Specific chapters are devoted to various program issues such as what students to consider as federally connected, how to determine the local contribution rate, whether to include public housing pupils, and whether the federal payments should be made for all federally connected students or only a part of them. The recommended program is then presented.

Although this report was financed by the Office of Education neither that Office nor any other federal agency sought in any way to influence the conclusions and recommendations for impact aid. The findings and recommendations in this report are solely Battelle's responsibility. These recommendations do not necessarily reflect the position of any government agency, the Congress, or the affected districts.

CHAPTER 1: A STRATEGY FOR ANALYSIS OF IMPACT AID

INTRODUCTION

Most government programs, including impact aid, have more than one objective, and not all of the objectives are consistent with each other. Further, some persons who are strong supporters of impact aid accept only some, but not all, of the objectives that the program serves. Thus, no one can design a single program that best meets the objectives of impact aid, because those objectives are viewed quite differently by different groups and individuals. Despite this, an exploration of the objectives of impact aid can provide a basis for further examination of alternatives. Such an examination can also provide a useful understanding of the environment in which impact aid policies are considered. Besides considering the objectives of impact aid, this chapter examines the other factors that must be considered in evaluating impact aid policies.

OBJECTIVES OF IMPACT AID

Through a review of the legislative history of impact aid legislation and discussions with many of the individuals who have affected the evolution of the current program, Battelle has identified three major objectives that are served by the impact aid program. These are (1) to provide good schools for federally connected children, (2) to offset the economic burden of federal activities on school districts, and (3) to provide a mechanism for increasing federal support of elementary and secondary education.

Providing Good Schools for Federal Pupils

Unquestionably one of the strongest motivations for the passage of P. L. 874 and P. L. 815 in 1950 was the situation of federally connected pupils.* In many areas of the United States, school districts were refusing to accept pupils from federal installations. In other cases, these students were being accepted only if their parents paid tuition. Even where school districts accepted responsibility for federal pupils, many districts were unable to provide a reasonable standard of education because they did not have sufficient tax base to provide both for local pupils and large numbers of pupils living on federal installations. The resulting situation was found by Congress and the Executive Branch to be highly undesirable because (1) many federally connected children were not receiving adequate educational opportunity, (2) tuition charges were considered an undue burden on federal parents when free public education was available to the children of all other parents, and (3) severe educational problems made federal employment less attractive.

The concern with providing good schools for federally connected children is applicable both to children living on federal property (who can be denied access to schools in some states) and to children living in privately owned dwellings (who cannot be denied free public education, but can be denied high quality education). In the course of its operations the federal government must recruit and retain employees to work in remote areas building dams and managing forests, to be shifted throughout the country as military requirements dictate, and to locate outside of major cities to work in atomic energy and other specialized federal activities. Thus, the federal government is concerned with all of the schools with which its employees will come in contact. A military officer, for example, can in successive years send his children to a dependent's school in France (operated directly by the Department of Defense); a base-operated school at Fort Campbell, Kentucky (funded under Section 6 of P. L. 874), and in the public schools of Lawton, Oklahoma (operated as a regular Oklahoma school system, but aided by P. L. 874 payments). The officer's perception of the desirability of his work is likely to be influenced by his impressions of the adequacy of his children's education in all three situations.

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*This situation, and the early background of the legislation, are well explored in I. M. Labovitz, Aid for Federally Affected Public Schools (Syracuse, 1963), Chapter 1.

The objective of good schools for federal pupils has two facets. The first is that the lack of free public education for any school-age child in the United States is to be deplored, and federal children are the one category of children that might be denied such education if a federal program were not designed to meet the problem. The second is that the federal government as an employer may find value in providing relatively good schools for the dependents of its employees. For example, one Member of Congress has argued:

> ...the Congress has provided the impact program not only to compensate for the burden but also to assure the parents in the Federal service that, regardless of where they are called upon to serve, their children would be afforded a certain standard for education.*

Offsetting the Economic Burden of Federal Activities on School Districts

As seen by many supporters of impact aid legislation, federal installations have the impact of increasing school costs without a corresponding increase in school revenues, or the effect of reducing school revenues because federal property is not subject to local taxes. When the federal government causes a student to become enrolled in a public school system, the system's costs must increase if the same level of education is to be provided to the students in the system as was provided before the coming of the federal pupils. This situation occurs regardless of whether the federally connected pupils live on a federal installation or in private residences. If a district is to maintain the same class sizes, it must build more classrooms and hire more teachers to accommodate its expanded enrollment.

The costs of educating pupils drawn to a school district by a federal activity could conceivably be offset by the added revenues of a school district caused by that activity. However, in the case of students living on a federal installation (e. g., a military base) whose parents work on the installation, the school district cannot collect property tax on either the residence of the child nor upon the place of employment of the parent. In the case of a child living in private (taxable) property but whose parent works on federal (tax exempt) property, it can be argued that the school district incurs the full cost of education of the child but is denied part of the tax revenues that it would normally receive from children of employed parents because the place of work of the parent is not taxable.

It can also be argued that the federal government creates a burden on school districts even when it does not cause an increase in enrollment. Such an impact could occur, for example, when the federal government acquires private (taxable) vacant land for use as a pond behind a federal dam. The school district's tax base is reduced by the federal action but its educational costs may not be. In a more speculative case, it can be argued that if the land occupied by a federal installation were not occupied by the federal government, it would be occupied by a taxpaying industry that would improve the revenue position of the school district.

This logic of the burden of federal installations clearly underlies the current impact aid program. To establish this, one need look no further than the declaration of policy in Section 1 of P. L. 874 which states:

> In recognition of the responsibility of the United States for the impact which certain Federal activities have on the local educational agencies in the areas in which such activities are carried on, the Congress hereby declares it to be the policy of the United States to provide financial assistance...for those local educational agencies upon which the United States has placed burdens by reason of the fact that--
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> (1) the revenues available to such agencies from local sources have been reduced as the result of the acquisition of real property by the United States: or
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> (2) such agencies provide education for children residing on federal property; or

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*Comments of Representative Bell in U. S. Congress, House of Representatives, Committee on Education and Labor, General Subcommittee on Education, Hearings, Impact Aid, 89th Congress, Second Session, 1966, p 48.

(3) such agencies provide education for children whose parents are employed on Federal property; or

(4) there has been a sudden and substantial increase in school attendance as the result of Federal activities.

Increasing Federal Support of Elementary and Secondary Education

Since 1950, the costs of education in the United States have skyrocketed as (1) more pupils attained school age, (2) school retention rates increased, (3) those engaged in education demanded increased compensation commensurate with their worth as they see it, (4) various new technologies made available many instructional aids - all at significant cost, and (5) public standards for schools improved. These increasing demands for funds coupled with education's dependence upon taxes that do not respond readily to inflation (particularly the local property tax) led to a genuine fiscal crisis in education. Under those circumstances many Americans - parents, teachers, local superintendents, school board members, federal administrators, and Members of Congress - sought additional funds for education from any and all sources available. One of the obvious sources was the federal government, and for many years the only meaningful way to transfer federal funds to local districts for elementary and secondary education was the impact aid program.

Over the years, as P. L. 874 eligibility criteria have been relaxed and more districts have entered the program, impact aid has become an important source of funds for districts that receive it. Leaders in many of these districts believe that they have educational problems - not necessarily related to federal impacts - that defy solution within the local and state resources available to them. Under these circumstances they see federal funds as the only answer, and find P. L. 874 as the best vehicle currently available for getting these funds. These districts find in P. L. 874 the only federal education program that does not dictate how the funds are to be used. Because many of the problems encountered by these districts do not fall within the scope of existing categorical aid programs, the districts have a strong interest in the continuation of impact aid.

The concern of these districts with acquiring additional revenues from any source (and with keeping established revenue sources such as P. L. 874) is one of the most potent factors in determining the character of the current program and the controversy over it. For many school leaders the concern over increasing federal funds overwhelms any concern over the characteristics of the program through which those funds are provided. For example, one school superintendent in an interview with a Battelle staff member admitted that the P. L. 874 payments to his district clearly overcompensated for any federal burden on the district. However, he argued that numerous school districts in his state got windfalls. For some, the windfalls came from a concentration of high valuation industrial property, for others it was shared revenues from federal lands, for his district it was P. L. 874. As long as school districts in the state have such windfalls he argued that he should get his (in the form of P. L. 874 assistance).

Another superintendent indicated that P. L. 874 was not really designed as a systematic federal attack on the special problem of Indian education, but argued that the program was the best alternative currently available to districts educating Indian children. Comparable arguments were made for providing P. L. 874 funds to large cities - both on the basis of public housing children and regular federal employees' children. These arguments were based more upon the needs of large-city school systems than on the economic impact of the federal government.

At the national level a number of organized groups (and Members of Congress) are pursuing the objective of increasing the percentage of elementary and secondary education expenditures financed by the federal government. To some of these groups and individuals, P. L. 874 is simply a means to the end of greater federal sharing of educational costs. Their evaluation of the appropriateness of the program is thus highly sensitive to their perceptions of the alternatives available to them. If they had the choice between some federal educational program of their own design and the current P. L. 874 program, they probably would not support the current P. L. 874 program. However, perceiving that they have no such choice in the real world of educational politics, they support P. L. 874 as being better than nothing even if they believe that it may overpay some districts and be somewhat inconsistent with a program designed to meet the net burdens of federal installations.

In discussing impact aid with individuals concerned with national support of elementary and secondary education, Battelle encountered comments like that paraphrased below:

> I think of P. L. 874 as a kind of river of funds that, along with other tributary rivers, creates a flow of federal dollars to education. I am really concerned with the total flow, which is far too small. In your study you may find that the river is pretty muddy, or that it meanders too much, but it still does the job of getting federal funds into local schools. Unless there are better rivers available, we will continue to fight for the rivers we already have, as an imperfect flow of funds for education is better than no flow at all.

The function of P. L. 874 in providing general education assistance does not end with the interest of local districts in retaining their existing funding sources. Among many educational leaders a belief persists that impact aid is politically necessary means to adoption of further federal education programs and full funding for existing programs such as Title 1 of the Elementary and Secondary Education Act. In the context of legislative attempts to ensure full funding for all education legislation, many observers believe that impact aid encourages Members of Congress who would normally not vote to increase the President's budget for social programs to support increased education appropriations. For these observers, P. L. 874 is seen as a means to get other educational legislation passed.

To some, the lack of a federal program of general aid for education has always seemed undesirable. Having been unsuccessful in obtaining a direct general aid program, they view impact aid as a way of getting general aid indirectly. To them, P. L. 874 provides a good vehicle because (1) it is politically popular, (2) it is widely accepted in the Congress, (3) it has effective and well organized supporters in practically all states and congressional districts, (4) it has low administrative costs, and (5) the uses of funds by the recipients are not controlled by the federal government. To this group the logical evolution of P. L. 874 is from a program concentrating assistance upon areas heavily impacted by military installations (basically the program passed in 1950) to a program that provides assistance based upon children – whether federally connected or not.

Relationships Among Objectives

While the three objectives listed above are related, they are by no means identical. It would be quite possible to meet the objective of providing good schools for federal children without providing assistance in all cases where the federal government has caused a net burden and without developing a program that would move toward general educational assistance. For example, such a "good schools" program would not need to provide funds for a district with high industrial tax valuation even though the per pupil tax valuation might be lower as a result of the federal impact. On the other hand, a program designed to meet the net burden of federal pupils might still be inadequate to provide good schools for federal pupils (e.g., in a poor rural school district with only a few federal pupils on whom assistance payments could be based). Further, a program providing for meeting the net burden of federal installations might not provide entitlements as large as the current impact aid programs and thus, not do as good a job of providing general aid as the current programs. Conversely, a general aid program – or a P. L. 874 program expanded to meet general aid objectives but not fully funded – might well fail to offset fully the net burdens of federal installations or to provide good schools for federal pupils.*

Different Objectives as the Source of Conflict Over P. L. 874

Much of the controversy over impact aid arises from the different objectives being pursued by those who take positions regarding it. These differing objectives make it unreasonable to expect complete consensus to develop around any single concept of impact aid. Specifically, even if Battelle has designed an impact aid program that perfectly compensates for the net burdens of federal installations, the program may be unacceptable to rational men of good will who see the purpose of impact aid as extending beyond compensating for the net burden of federal installations. For example, to those seeking to forge a political alliance adequate to carry a program of general educational aid, a perfect net burden program would appear as a poor impact aid alternative. A program that provided good schools for federal pupils by targeting federal payments toward the education of these pupils rather than by making payments available for all children in the impacted district (as the current program does) would be found unacceptable by the recipient districts and probably by the advocates of using impact aid as an approach to general aid. A program explicitly designed to meet general aid objectives (without any special provision for federally connected pupils) would appear unsatisfactory to those districts that do perceive a net burden from federal installations and by those parents (and their federal employers) who believe that federal pupils may deserve better education than the combination of a reasonably sized general aid program and state and local funds would provide.

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*These conflicts among objectives are by no means academic. The impacted districts have in 1969, had a substantial internal debate over whether public housing entitlements (reflecting a general aid broadening of the P. L. 874 concepts) should share in P. L. 874 appropriations if less than enough money were available to pay full entitlements.

This difference in objectives means that a report such as this has certain inherent limitations. While it may develop a good program designed to meet net burden objectives - it may not bridge the gap between an Administration interested in meeting the net burden of federal installations and school districts interested in preserving and expanding their revenues from the federal government, regardless of the burden of federal activities on them.

A STRATEGY FOR DEALING WITH THE MULTIPLE OBJECTIVES OF IMPACT AID

While research can be used to discover the objectives of various decision makers who deal with impact aid, that research can never indicate whether such objectives are sound. Inherently, the establishment of program objectives involves value judgments. For example, whether the federal government should attempt to impose the costs of educating children of federal employees upon local taxpayers, or pay those costs itself, involves a value judgment not amenable to research findings.* There is good reason to believe that researchers are no better at dealing with these questions than any well informed citizen. Thus, this report does not attempt to argue that any of the objectives of impact aid are either "good" or "evil".

Research can contribute substantially to consideration of objectives in several ways. First, research can indicate the feasibility of pursuing or not pursuing an objective. For example, research can indicate (as this report does) whether the federal government could impose the costs of educating federal pupils on local taxpayers. Second, research can indicate the consequences of not pursuing an objective. It can help to answer the question: How would educational systems in heavily impacted districts be affected if the federal government did not pursue an objective of good schools for federal pupils or meeting net burden from federal installations? Third, research can point out circumstances where some alternative program might be more effective in achieving an objective. Fourth, research can help the decision maker consider his potential selection of objectives by pointing out the costs of pursuing (or achieving) those objectives. This type of research can tell the decision maker what he can get in relation to what he has to pay to get it. With this information the decision maker can then determine whether his objective is "worth" achieving. To achieve these four useful results this report adopts a series of explicit program analysis strategies which represent specific articulations of the objectives of impact discussed earlier. These explicit strategies take the form of statements about what a "perfect" impact aid program should or should not do. These statements in turn form a set of decision rules by which program choices can be made among the set of available program alternatives. These strategies are described below.

Providing Good Schools for Federal Pupils

Persons concerned with education are painfully aware that the field lacks any agreed measure of educational accomplishment. This lack stems primarily from the fact that educators, parents, administrators and others do not agree on exactly what the educational process is supposed to accomplish. As a result educational quality is frequently measured by inputs rather than outputs. Such input measures include (1) the educational attainment, experience and compensation of teachers, (2) the quantity of instructional materials, (3) the availability of special programs ranging from vocational education to counseling, and (4) the ratio of pupils to teachers. These input measures are all reflected in the per pupil costs of education. For the purposes of this study only, Battelle has assumed that increased educational inputs are related positively to increased educational outputs. From this it follows that the more a school system spends per pupil the better it is.

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*In economic terms, this is an income redistribution question. It is comparable to the question of whether government should tax the rich to subsidize the poor (or vice versa) or tax citizens of New York to improve the welfare of citizens living in New Mexico. Economists have long recognized the impossibility of saying whether society as a whole is better or worse off when it takes money from A to give to B.

Per pupil expenditures for federally connected pupils tend to be the identical with per pupil expenditures for non-federally connected pupils in the same school system. This finding is based upon the fact that the largest group of federally connected children (the children whose parents live on private property but work on federal property) are educated in the same classrooms as their non-federally connected neighbors. In the case of the students who reside on federal property, the same determinants of educational costs (e.g., teacher salary schedules, and instructional materials) generally prevail for the federally connected children as for those that are not federally connected, even though the federally connected children may attend school in a different school building. Thus, federally connected pupils in a particular school system are presumed to be getting a better education if the expenditures per pupil in the district are increased, and a worse one if they are decreased. This presumption, particularly when it is used only to compare expenditure levels within the same school system, simply reflects the common sense notion that greater expenditures on education tend to increase education output to some extent.

The only way that impact aid can raise the per pupil expenditures for federally connected pupils in a district is to raise the per pupil expenditures for all pupils in that district. This presumption suggests that the marginal efficiency of federal dollars used to pursue the objective of good schools for federal pupils is a function of the federal impact upon the district as measured by the percentage of pupils that are federally connected. Table 1.1 compares the change in expenditures per federal pupil to the change in expenditures in an impact aid program for districts of varying federal impact.

TABLE 1.1. MARGINAL EFFICIENCY OF IMPACT AID IN PROVIDING GOOD SCHOOLS FOR FEDERAL PUPILS IN VARIOUS DISTRICTS

Federal Students as Percent of Total Students	Increase in Per Pupil Impact Aid Payment Needed to Increase Expenditures Per Pupil by $10.00 (dollars)
100	$ 10.00
50	20.00
20	50.00
10	100.00
5	200.00
3	333.33
1	1,000.00
1/2 of 1	2,000.00

Source: Battelle calculations.

Where a district is composed entirely of federal pupils, all impact aid payments accrue to the benefit of those pupils. On the other hand, in a district where only 3 percent of the pupils are federally connected, the federal government must spend $333.33 in impact aid funds ($323.33 of which goes to non-federal pupils) for each federal pupil to be benefited by a $10.00 increase in per pupil expenditures. This suggests that impact aid is a poor tool for providing better schools for federal pupils in the lightly impacted districts because such a small percentage of impact aid expenditures actually benefit the federal pupil. In the extreme case of a district educating 10,000 pupils only one of whom was federally connected, the federal government would have to pay the price of improving the education of 9,999 non federal pupils in order to improve the education of the one federal pupil.* It follows from this that the only totally effective way to provide good schools for all of the federally connected pupils in the United States is to provide good schools for all pupils in districts educating federally connected pupils. This is tantamount to providing good schools for all pupils.

It is also true that for the purposes of improving the education of federal pupils in lightly impacted districts, a program of impact aid may be no better than expending the same funds on a program to aid all pupils. For example, in a district of 100 pupils that had three federally connected pupils the federal government could achieve the same effect by providing $1,000 in revenue sharing (or federal education aid on a $10 per pupil basis) as it could by paying $1,000 based upon a payment of $333 for each of the federal pupils. In either case, the federal pupils (and the non-federal pupils) would benefit from a $10.00 per pupil increase in educational expenditures in the district.

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*This problem could be overcome by earmarking the assistance for the use of the federal pupil, but because of the potential to shift locally financed expenditures away from federal pupils to non-federal ones, it is doubtful if such earmarking could be effective.

Thus, an objective of providing good schools for federal pupils would indicate that federal impact payment should be concentrated where it is most effective – that is upon the most heavily impacted districts where the payments would be less diluted by the necessity to raise expenditures for non-federal pupils at the same time they are being raised for federal pupils. Also, for very lightly impacted districts, payments of general aid for education based upon all pupils may be more efficient in improving the level of education provided to federal students than payments of impact aid based only upon federal students.

Increasing Federal Support of Elementary and Secondary Education

While the impact aid program does have the effect of increasing federal support of elementary and secondary education, it is by no means the only program available for this purpose. Although impact aid is inherently easier to administer than most federal education programs, other federal education programs could be developed that would be even easier to administer than impact aid with its students survey procedures. These alternatives include: (1) revenue sharing – the sharing of some federal tax revenues with school districts based upon a formula allocating funds in proportion to the expenditures or revenues of the recipient, (2) educational grants to state governments for distribution within the states, and (3) per pupil federal grants based upon the numbers of pupils in a district. Other more complicated alternatives are also available, such as a federal education program targeted toward large cities and/or poor rural areas, or a program that would, like state equalization formulas, provide a minimum standard of education throughout the United States, regardless of the wealth of a particular state or school district in which a student happens to be found.

By comparison to programs like those listed above, impact aid has major disadvantages as a vehicle for increasing federal support of elementary and secondary education. The most important of these is that the distribution of educational problems among districts in the United States does not correlate with the distribution of federal pupils among those districts. The heavier the federal impact (measured by the percentage of students that have parents working on federal property), the less is the probability of a large percentage of disadvantaged students. Likewise, districts with heavy federal impact do not usually include the rural pockets of poverty that constitute the districts in the United States with the lowest tax base per pupil. In short, impact aid is an imperfect way to reach many of the educational problems of the United States. For these reasons, Battelle has not tried to design an impact aid program directed towards the objective of increasing federal support for elementary and secondary education on the grounds that that objective can better be achieved by some vehicle other than impact aid.*

Battelle is not in a position to make basically political decisions on the relative importance of federal spending on education, vis-a-vis federal spending on space, defense, housing, or other programs. Nor is Battelle in a position to make any judgments concerning the relative desirability of lower taxes and fewer federal programs or more federal taxes and more programs. For that reason, we have considered alternatives not in terms of whether they would provide more or less federal dollars for education, but in terms of whether they represented the best use for education of any given level of federal dollars available for educational purposes. We recognize that many readers of this report may not accept this assumption and will believe that if the impact aid program is reduced, the savings will not be expended upon other educational programs. All readers of this report should recognize that the recommendations below are based explicitly upon the assumption that their implementation would cause neither an increase or decrease in federal funds that would otherwise be devoted to elementary and secondary education.

Battelle has not, however, sought to balance other programs for the support of elementary and secondary education by recommending increases in particular non-impact aid programs to "spend" any savings from our impact aid recommendations. For example, the recommendations of this study would tend to reduce the impact aid payments to many of the nation's large city school systems. This is not a conclusion that large cities should get less federal education funds. It merely means that impact aid is not the appropriate vehicle to provide such funds.

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*One very important political question avoided by this approach is whether the continuation of a program of impact aid that is unlikely to receive Administration recommendations of full funding is necessary to enhance the political support for Congressional action to move toward full funding of other education programs. Battelle is obviously not in a position to answer a question of this type.

Another aspect of the relationship of the objective of increasing federal funds for elementary and secondary education and the objective of compensating for the burden of federal installations merits mention. Many leaders of school districts that are heavily impacted by federal activities have supported the broadening of the program toward general federal aid to education on the theory that such a step was necessary to insure that a program of meeting the economic burden of federal installations would be continued and fully funded. The underlying theory was that to obtain Congressional support (in order to prevent Presidential recommendations for reduced aid from being implemented), it would be desirable to insure that impacted aid recipients could be found in as many Congressional districts as possible.* If it is true that providing assistance to districts not burdened by the economic impact of federal activities is necessary to continue a program of assistance to districts that are burdened, then a program of impact aid confined to meeting that economic burden could not achieve its objectives.

Offsetting the Economic Burden of Federal Activities

The elimination of the general aid objective from consideration yields a strategy that directs attention toward the dual objectives of (1) providing good schools for federal pupils and (2) offsetting the economic burden of federal activities. Because (for the reasons discussed in Chapter 2), the economic burden of federal activities tends to be most significant where the percentage of federal pupils is the highest, and because the marginal efficiency of federal funds used to provide better education for federal pupils is also highest in these same districts, the two objectives of offsetting the economic burden of federal activities and good schools for federal pupils tend to converge.

The Decision Rules for Design of a Program

Based upon this analysis, Battelle has sought to design a federal program of impact aid that approximates the objective of offsetting the net burden of federal activities as closely as is feasible. Likewise, the present program is evaluated in terms of that objective. This approach results in the following three decision rules:

(1) The formula recommended should come as close as possible to measuring net burden, treating overpayments and underpayments as equally serious errors. It can be argued that federal budget stringencies and the importance of conserving scarce federal funds for other federal programs would indicate that all doubts about the validity of payments should be resolved in favor of reducing the costs of the impact aid program. Such an argument would dictate that, to the extent that any formula would not be a perfect measure of net burden, errors should be made in the direction of underpayments rather than overpayments.

Alternatively, it can be argued that the consequences of underpayment is unfair treatment of districts by the federal government, while overpayments simply tend to increase elementary and secondary education expenditures or reduce local tax burdens and that, therefore, any uncertainty should be resolved in favor of higher payment levels.

In formulating recommendations, we have accepted neither of these approaches but have instead tried to approach net burden concepts as closely as we know how. Decisions to prefer underpayments to overpayments or vice versa are inherently political ones.

(2) Other things being equal, underpayments should be avoided more in heavily impacted districts than in lightly impacted districts, and overpayments should be avoided more in lightly impacted districts than in heavily impacted districts. Because impact aid accounts for a much larger proportion of total

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*This logic in effect presumes that no Administration will ever be in a position of recommending payment of full entitlements for an impact aid program, which may or may not be true. It also presumes, in effect, that the more a federal program costs the easier it is to get appropriations for it. Whether these presumptions are true is a political question upon which Battelle makes no finding.

revenues (and revenue resources) in such districts, underpayment mistakes are more serious in heavily impacted districts. Underpayment of 10 percent in a district that gets 50 percent of its funds from impact aid implies a school budget that is 5 percent too low; but underpayment of 10 percent in a district that gets only 5 percent of its budget from impact aid implies a total budget that is only one-half of one percent too low. On the reverse side of the same coin, overpayment in a district with a high concentration of federally connected pupils tends either to provide good schools for federal pupils (an objective of the program) or tax relief for their parents – in most cases, probably a mixture of the two. On the other hand, overpayment in a district that has, say 10 percent federal pupils means that 90 percent of the benefit of the overpayment will not go to federal pupils.

(3) Other things being equal, underpayments should be avoided more in poor districts than in rich districts and overpayments should be avoided more in rich districts than in poor ones. This proposition follows from two principles. First, there is the notion that an overpayment in a rich district does less for improving the education of federally connected students than a similar overpayment in a poor district. Assuming that (1) rich districts are likely to spend more for education than poor districts, (2) that impact aid is spent for education (as opposed to being used to reduce local tax effort), and (3) that the marginal productivity of a dollar spent for education decreases as the total amount spent increases then overpayments in rich districts produce less additional gain for improved education of federally connected pupils than a similar error in a poor district would.

Second, there is the equity concept of equalization – that is a redistribution of tax base wealth in effect to make every school district capable of maintaining the same level of educational quality for the same tax effort. Thus, if one assumes that impact aid goes to reduce local effort, it follows that tax relief is more appropriate in poor districts than in rich ones. For example, we have presumed (without attempting to prove) that moving from per pupil expenditures of $400 to $420 yields a greater gain in educational output than moving from expenditures of $1,000 per pupil to expenditures of $1,020. In reverse we have assumed that reducing per pupil expenditures from $400 to $380 in a district is more severe in its negative educational impact than reducing per pupil expenditures from $1,000 to $980 in another district.

PROGRAM COSTS AND EDUCATIONAL BENEFITS

The federal funds used for the impact aid programs are not free. They must be raised from the federal taxpayer or, assuming constant taxes and no borrowing, must be provided at the expense of some other federal program or activity. In dealing with the economic consequences of costs of an impact aid program, it is important to consider the purpose for which the cost is incurred (or avoided). Specifically we will examine the economic consequences of cost incurred in (1) administering the program, (2) increasing direct educational expenditures, and (3) in reducing tax effort.

Administrative Costs

Administrative expenses for impact aid are, of course, necessary. These expenses, however, represent a using up of national resources without direct benefit to students. The administrative costs that should be taken into consideration fall in three groups. First, there are administrative costs that are explicitly budgeted as represented by a salaries and expense appropriation for federal impact aid. Second, there are the administrative costs at all levels of government that are not normally identified as impact aid costs. At the federal level these include the expenses of the Office of Education and the Department of Health, Education, and Welfare overhead relatable to impact aid employees and the expenses other government agencies incur in connection with the program. At the state level these costs consist of the efforts devoted to administration of impact aid (without compensation from the federal government). At the local level these costs include the costs of making student surveys, filing application forms, urging Congress to appropriate funds and miscellaneous functions (such as filling out Battelle's questionnaire on P. L. 874 and P. L. 815). Third, there are the administrative costs that do not appear anywhere in any government's budget. Not the least of these are efforts required on the part of parents of some 22 million children in districts receiving impact aid to fill out the student survey forms required by the program.

Program Costs Used to Increase Educational Inputs

In many districts that receive P. L. 874 payments, the impact of these payments is undoubtedly to increase spending on education by the amount of the payments. In these cases (given our assumption that increased educational inputs give rise to increased educational outputs) the expenditures are, unlike administrative costs, always productive of additional education.

Program Costs Used to Keep Taxes Low

Many persons involved in the impact aid program assume that all of the impact aid dollars represent net additions to educational spending. Others see that this effect does not always occur, but are concerned when it doesn't. For example, Representative Perkins (now Chairman of the House Education and Labor Committee) once commented that a report by the Stanford Research Institute had pointed out "that these funds in certain sections of the country have supplanted local effort which certainly is bad and none of us want to see that happen". *

The use of federal dollars to avoid increasing local taxes is a natural result of the present program. Given the underlying theory of the program, it is not necessarily a bad result. If the federal impact upon a district is to increase the number of pupils without increasing the tax base, in the absence of impact aid the district must raise its tax rate in order to provide the same expenditures per pupil it would have without the federal pupils. Because forcing the local taxpayers to raise taxes to support federal pupils is considered unfair, the federal government provides assistance that, roughly speaking, allows the district to maintain its per pupil expenditures without having to raise taxes.

Given this situation it is not surprising that a number of districts advised Battelle in response to its questionnaire and in personal discussions that the effect of reduced P. L. 874 payments would be to force them to increase taxes to maintain their educational programs. To the extent this is true the P. L. 874 payments made by the federal government avoid the necessity for higher taxes. This means that in at least some districts the effect of impact aid is to reduce taxes below what they would otherwise be. So viewed, some impact aid payments are simply transfer payments from the general taxpayer to local taxpayers in recipient districts.

Implications of the Analysis of Cost

This analysis of cost is significant for the design and evaluation of impact aid programs because of its implications about the consequences of error. Assume for the moment that the appropriate impact aid program exactly compensates for the net burden of federal installations. An error in program design that causes administrative costs to be 5 million dollars more than they should be represents sheer waste of national resources (assuming that the employees could find work elsewhere in the economy). An error in program design that causes 5 million dollars in overpayments to districts that spend the funds for education may cause per pupil expenditures in those districts to be, say $670 per pupil rather than $660 per pupil. Such an error is undesirable (by definition) but the consequences are better education in some districts. Though these may not be the districts in which the 5 million could be used the most productively, the funds are clearly not wasted in the way they would be if used for administrative costs. Likewise, an error in program design that causes 5 million to go to districts that as a result have lower local tax rates merely represents a transfer out of the pockets of general federal taxpayers to the pockets of the local taxpayers. This transfer may or may not be desirable from a social point of view, but in any case does not represent the using up of any economic resources.

This analysis of error consequences indicates that federal budget impact alone is not the appropriate criterion for judging alternative impact aid approaches. Assume, for example, that it could be shown that increasing administrative costs by 5 million could save 5 million in payments through cutting down the local contribution rates claimed by recipient districts. From the federal budget perspective, increasing the administrative costs wouldn't seem unreasonable – it would represent spending 5 million to "save" 5 million. From the national point of view, however, the added administrative costs would be

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*U. S. Congress, House of Representatives, Committee on Education and Labor, General Subcommittee on Education, Hearings, Impact Aid, 89th Congress, 2nd Session, 1966, p 69.

highly undesirable. These added administrative costs consume social resources without producing much social achievement. On the other hand, if the overpayments are used to increase educational programs they will presumably result in better education. If the overpayments are used to reduce local taxes, they result in increasing the resources which taxpayers have available for their personal consumption objectives or to pay other types of taxes.

The moral of this analysis is that in the context of impact aid not all costs are equivalent. Moving toward more precision in calculations of entitlements (with resulting increases in administrative costs) may be more expensive to society than tolerating some overpayments (or underpayments if the savings were used for socially desirable purposes) for the sake of an easily administered formula.

OTHER DIMENSIONS OF ANALYSIS

Any program as large as the current impact aid program is bound to have a number of repercussions that constitute a significant portion of the overall impact of such programs. In the case of impact aid these include the effects on the overall relationships among federal, state, and local government in the education field; the impact upon state aid efforts and the formulas used to distribute state aid; the effect upon school district reorganization and consolidation; and the overall effects upon the distribution of national resources among various states and local areas. Battelle's strategy of analysis includes specific treatment of these effects for both the current program and the recommended program.

SUMMARY

Impact aid currently serves a number of quite separate objectives. These include providing better schools for federal pupils, compensating for the net burden of federal installations and increasing federal financial support for elementary and secondary education. The size and nature of an "ideal" impact aid program depends upon which objective one selects for the program. A program designed to achieve one objective may do poorly in terms of one of the other objectives.

The primary focus of the remainder of this report is upon the objective of offsetting the economic burden of federal activities on school districts. This chapter concluded that the objective of good schools for federal pupils could as easily be achieved by general aid as by impact aid in the lightly impacted districts and noted that the greatest concentrations of federal pupils were likely to be found in those districts where the economic effect of federal activities was most significant. Because impact aid (with its inherent feature of counting federal pupils) is less satisfactory as an approach to increasing federal support of elementary and secondary education than a group of other program options, no attempt is being made in this report to convert impact aid into a more general program of educational assistance.

CHAPTER 2: THE ECONOMIC IMPACT OF FEDERAL ACTIVITIES ON SCHOOL SYSTEMS

THE CONCEPT OF NET BURDEN

School superintendents in areas near federal installations perceive a burden from the installations. These perceptions vary, but basically incorporate elements of an increase in the number of children to educate, coupled with income loss as a result of the non-taxability of federal installations. Other observers have noted that many areas work very hard to get federal installations located in their community and fight any attempt to close those installations. Many find this desire to have more federal activity inconsistent with the notion that that activity creates a major burden upon the community. These disagreements about the current impact aid program can be traced to this basic argument over impact.

Burden on Whom?

A significant source of conceptual difficulties in dealing with burden has been the failure to specify with precision on whom the alleged burdens and benefits are presumed to have fallen. For example, it is possible that a new federal installation will provide more income to a local storeowner without increasing his costs, thereby creating a benefit for him. It is equally possible for the same installation to bring new children into the school system without significantly increasing its tax base, in which case a school superintendent will perceive a burden. Yet it is difficult to recognize a burden on a school system as a conceptual matter unless that burden is ultimately shifted from an institution to individuals either as students or taxpayers. For this reason, burden needs to be specified in terms of who might ultimately bear it.

What is Burden?

The burdens of federal installations must work themselves out in one of two forms. Either the burden must be absorbed by children in the form of a reduction in the quality of their education or by the local taxpayers (or partly by state taxpayers through state aid) in the form of an increase in their tax rates. To some extent that burden might also be absorbed somewhat by teachers and other school system employees in the form of lowered compensation. In the cases of the burden being borne either by the students or by school system employees, such burdens would only arise in the event that the federal impact caused the revenues of the school district to be less per pupil than they would have been without the installation. This situation could arise only if the revenues induced by the federal activity* were less in relation to the pupils caused to be in attendance through the federal activity than the existing revenues of the district in relation to the existing pupils in the district. This definition is shown below:

$$\text{Burden}=(\text{Costs}_{\text{with}} - \text{Costs}_{\text{without}}) \text{ minus } (\text{Revenue}^{**}_{\text{with}} - \text{Revenue}^{**}_{\text{without}}) \qquad (1)$$

The Burden on Impact City

For the purposes of showing the impact of the analysis of burden, Impact City has been invented as a hypothetical school district. The characteristics of Impact City schools are shown below.

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*We exclude the effects of "forced" additional tax effort from the "revenues induced by the federal activity".

**In line with the note above, revenues are calculated at a fixed level of tax effort (i.e., tax rates are held constant).

TABLE 2.1. IMPACT CITY STATISTICS

		After Impact: Alternatives		
	Before Impact	Cost Adjustment	Tax Adjustment	Impact Aid
Students	100	200	200	200
Tax Base	$5,000,000	$6,000,000	$6,000,000	$6,000,000
Tax Rate	1 percent	1 percent	1-2/3 percent	1 percent
Expenditures Per Pupil	$600	$400	$600	$600
Local Revenue	$50,000	$60,000	$100,000	$60,000
Local Revenue Per Pupil	$500	$300	$500	$300
State Aid	$10,000	$20,000	$20,000	$20,000
State Aid Per Pupil	$100	$100	$100	$100
Impact Aid	$0	$0	$0	$40,000
Total Current Expenditures	$60,000	$80,000	$120,000	$120,000

Source: A Battelle hypothetical case.

To the purpose of this example, Battelle is presumed to have calculated accurately the number of additional pupils (who may or may not have parents who are employed on federal property) caused by the federal activity and the added tax base (which may or may not be taxes on homes of federal employees) caused by the federal activity.

Substituting these data into Equation 1, we find that the burden on Impact City would be $40,000.* With no change in tax rates school revenues would have increased by $20,000 by reason of the federal impact while costs will have increased by $60,000. This calculation indicated that (assuming the facts as stated) the federal activity would cause a $40,000 gap between school revenues and school expenditures in Impact City. This gap would, of course, never be allowed to develop as Impact City, like most school systems, cannot legally run its operating budget in an unbalanced condition.

The gap can be filled in one or a combination of three ways. First, the students can be made to bear the burden by a reduction in expenditures per pupil from $600 to $400 to balance the budget. Second, the local taxpayers can bear the burden by increasing the tax rate from 1.0 to 1-2/3 percent. Third, the federal government can bear the burden through an impact aid program payment of $40,000. In addition, the state could increase its per pupil assistance from $100 to $300.

The basic theory of net burden rests upon the value judgment that the federal government cannot equitably make either the students or the local taxpayers pay the added costs imposed by the federal government. From this theory it follows that a net burden impact aid program for Impact City would pay $40,000.

The Entitlements Formula

From this approach it follows that the formula for determining impact aid entitlements under the net burden concept simply substitutes entitlements for the concept of burden in Equation (1). Thus,

$$\text{Entitlement}=(\text{Costs}_{\text{with}} - \text{Costs}_{\text{without}}) - (\text{Revenue}_{\text{with}} - \text{Revenue}_{\text{without}}) \qquad (2)$$

where costs are based upon a constant per pupil expenditure and revenues are based upon a constant tax rate.

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*Costs without equals 100 students times $600 per student, or $60,000. Costs with equals 200 students times $600 per student, or $120,000. Revenues without equals $50,000 from local taxes plus $10,000 in state aid, or $60,000. Revenues with equals tax base (6,000,000) times tax rate (assumed to remain at 1 percent) plus state aid ($20,000), or $80,000.

Payment of such entitlements will mean that a school district will offer the same quality education (measured by cost) with the same tax effort (rate) with the federal impact as without.

Key Assumptions in the Formula

The entitlements formula described by Equation (2) carries some key assumptions or simplifications that need to be examined specifically.

Quality Measured by Cost. The formula arrives at an educational expenditure per pupil in the "with" federal impact case that is identical to the expenditure per pupil in the "without" federal impact case. It presumes that equal educational quality would be indicated by equal expenditures per pupil. For any given indicator of educational quality this relationship may not hold. For example,

(1) The federal induced pupils may live farther (nearer) to the schools thereby increasing (reducing) transportation costs.

(2) The federal induced pupils (or the local pupils) may have characteristics of a cost increasing or decreasing nature. Such characteristics might include concentration in grades with lower cost per pupil, discipline and guidance problems, incidence of mental retardation, physical defects, etc., more administrative costs because one group moved more often than the other, and a variety of other differences.

(3) There may be economies of scale (or diseconomies of scale) indicating that the per pupil costs of educating additional students would be less (more) than educating the students already in the system.

The implicit assumption of no economies of scale is wrong for very small school districts (e.g., where there are insufficient students to support a reasonably sized school), but reasonable for other districts. Most educational expenditures are a direct function of the number of pupils in the system. Educators consciously attempt to hold inputs constant on a per pupil basis by, for example, providing one book per child in a course, by keeping a constant pupil-teacher ratio and through calculating square foot building requirements on a per-pupil basis. To the extent that they succeed in this effort, any economies of scale would have to be found in central administrative operations, purchasing, maintenance, and transportation. These categories represent a small portion of educational costs.

The key aspect of the assumption that cost measures quality can be seen by considering the Impact City example, where it was shown that the federal burden could be met by a reduction in per pupil expenditures from $600 to $400. If it could be argued that a $400 education is as good as a $600 education, then there would be no burden if the school system simply reduced its expenditures per pupil. Because the clear consensus of public opinion and professional educational judgment indicates that more educational input (measured in dollars) is usually related to educational output (quality), and because no alternative assumption seems reasonable for formula-writing purposes, the assumption that quality can, for present purposes, reasonably be measured by cost appears reasonable.

Higher Tax Rates As a Burden. The entitlements formula presumes that higher tax rates would be an unjust burden on the local taxpayers. This corresponds to common sense notions of equity. As seen by a local taxpayer owning a $25,000 house in Impact City (tax - $250,000), there is no reason why his taxes should increase to $417 simply to provide for new pupils induced to come to his city by a federal action.

It can be argued that federal installations may create economic gains (e.g., increased incomes) that do not get reflected in the tax base of the school district. If such circumstances were substantial in magnitude and widespread in distribution, a district could increase its tax rate without leaving its citizens (in the aggregate) worse off as measured by the proportion of income that would be taken for schools. On the other hand, increases in tax base (and thus tax liability) may occur as the result of a federal installation. For example, greater demand for real estate in the area may raise the selling price of houses and ultimately, through reassessment, raise the assessed value of all residential property. From the standpoint of a citizen who holds the same job at the same pay and lives in the same house as he did before the federal activity started, such a reassessment represents increased taxes without increased income.

Furthermore, such measures as income and property tax base do not provide measures for most of the changes in local citizen welfare related to the federal activity. Individual citizens may feel a burden from the changing nature of their community, from the noise or traffic associated with the installation or from a variety of other causes. Other individuals may like the community better with the installation than without it. Neither the magnitude nor the direction of such intangible impacts are captured by a measure like tax base. The entitlements formula basically assumes that the relationship between these intangibles and tax base are essentially the same with the installation as without. This assumption certainly appears more reasonable than any other assumption that could be made. More important it is likely to correspond to reality because most areas with federal installations have had them for some time. While some lags in the conversion of new income into tax base (e.g., by the purchase of homes) may occur when an installation first locates in a community, those lags have long passed in most federally affected communities.

MEASURING THE COST ELEMENT

The net burden entitlements formula of Equation (2) measured the difference between costs with a federal installation and costs without that installation. Given the assumption that expenditures per pupil will be constant, this means that the cost term is simply a function of the number of students. This is indicated algebraically below.

$$\text{Cost}_{\text{With}} - \text{Cost}_{\text{Without}} = \text{Students}_{\text{With}} \times \left(\frac{\text{Cost}}{\text{Student}}\right)_{\text{With}} \text{ minus Students}_{\text{Without}} \times \left(\frac{\text{Cost}}{\text{Students}}\right)_{\text{Without}}$$

$$\text{But } \left(\frac{\text{Cost}}{\text{Student}}\right)_{\text{With}} = \left(\frac{\text{Cost}}{\text{Student}}\right)_{\text{Without}}$$

Thus

$$\text{Cost}_{\text{With}} - \text{Cost}_{\text{Without}} = \left(\frac{\text{Cost}}{\text{Student}}\right)_{\text{Without}} \times \left(\text{Students}_{\text{With}} - \text{Students}_{\text{Without}}\right)$$

In words, this simply means that the costs caused by the federal government can be measured by the per pupil expenditures of the district (assuming no federal impact) times the number of students the federal government caused to be in the district, as measured by subtracting the students that would be in the district (without any federal impact) from the total students in the district with the impact.

Counting Students With and Without Impact

Counting the total number of students in a federally affected district is, of course, a simple matter. There remains, however, the problem of calculating the number of students that would have been in the district in the same year if there had been no federal impact. For example, to implement this portion of the formula for Arlington County, Virginia, requires nothing less than a determination of the number of students that would be attending Arlington County schools in, say, 1969-70 if the federal government had never had an impact on Arlington.

Of course, no one knows or can develop a reasonable way of finding out how many students would reside in Arlington (or even whether the county would have its present boundaries) if there had been no federal impact. Perhaps, if the federal government had located in Philadelphia rather than in Washington, Arlington would be a residential suburb for the major ports of Georgetown and Alexandria. Perhaps it would have become part of a regional trade center and resemble the Atlanta, Georgia, area. Perhaps it would have become a major manufacturing center like Birmingham. Perhaps it would have become a Virginia state park, perhaps it would have retained a rural character like some downstate Virginia counties. How many students Arlington County would have had in the absence of any federal impact is basically unknown and unknowable.

Thus, there is no way to measure the "without federal impact" student counts in order to implement the net burden formula.

Measuring the Difference

If we cannot arrive at the difference between the "with" and "without" impact situation by calculating the students involved in each and subtracting, perhaps it would be possible to measure the change more directly by identifying the types of students involved in the increase (or decrease). This can be approached by categorizing the students in a federally affected district who would not be there without the federal impact and those not in the district who would be there but for the federal impact.

(1) Students in the district who would not be there but for the federal activity (the federally caused increase in students)

  a. Children of federal employees living in the district who would not otherwise be in the district

  b. Children of persons who sell services or goods to the installation who would not otherwise be in the district

  c. Children of persons who sell services or goods directly or indirectly to the parents in a and b above and who would not otherwise be in the district

(2) Students not in the district who would be there but for the federal activity (the federally caused decrease in students)

  a. Children of parents who would have moved into the district to carry out activities that would have developed but for the federal installation (e. g., longshoremen in Alexandria)

  b. Children of parents who moved out of the district because of federal activity.

In common-sense terms, this categorization indicates that the federal government's impact on students in a district is composed of those students in the district who wouldn't be in the district except for the federal activity, minus those students that would be in the district if it hadn't had the activity but are not there now.

Category (1)(a). This category of students is included in the set of all students whose parents work for the federal government. However, there are a number of students whose parents work for the government who cannot properly be included in the category. These include those students whose parents would have remained in the district even without federal employment. There is undoubtedly a large number of such students. The scrubwoman in a federal office building in New York would probably be scrubbing some other floors in New York, if the federal activity had not been present. The Oklahoma rural resident who quit full-time farming to work at the Air Force Base would probably be in the district without the Air Force Base. The civilian employee loading Air Force cargo in Dayton might well be loading some other cargo if the Air Force had not come to Dayton. Because we do not know what economic activity would have taken place in an area without the federal activity, we have no way of knowing what proportion of federal employees would have been in the district if there had been no federal impact.

Category (1)(b) and Category (1)(c). For obvious reasons, the same difficulties present in the case of Category (1)(a) also preclude measurement of these categories. Standard methods for measuring induced employment can measure the number of jobs and conceivably even the number of children that are related indirectly to the economic stimulus of an activity like a new factory or a military base. These methods, however, cannot measure what would have occurred without the federal installation.

Category (2). Most discussions of impact aid assume that the federal government creates a burden on a school district when (other things being equal) it causes children to come into the district. If this is correct, it must logically follow that the federal government provides a benefit to a district when (other things being equal) it causes children to go out of a district. Because the federal government has kept Washington, D. C. from becoming a port, the Washington school system gets the benefit of not having to educate the children of longshoremen. Because the federal government has occupied some choice oceanfront property in California, the California districts do not have to educate the children who might otherwise live on that land. Likewise, the Corps of Engineers may purchase land for flowage easement behind a dam, and in the process move some children out of a school district that would otherwise have to provide for their education.

Federal Activity Defined. The logic of the net burden concept indicates that the federal government can be considered responsible for all of the burdens it creates on local schools. This logic would imply a program much more substantial in scope than the present program. The federal government may stimulate economic growth in a local area by such means as (1) CAB airline route awards, (2) an export promotion program, (3) providing assistance to a state to undertake a highway program, (4) loans for housing construction, (5) subsidies to agricultural production, (6) requiring pollution control equipment, (7) establishing a new national park, and (8) by thousands of other ways. These all tend to cause increased numbers of students and there is no particular reason to assume that the change in the costs of education in a district will be exactly offset by increased revenues in all of these situations.

Impact aid basically singles out from all of these the impact that is involved when the federal government itself owns property, with the exception of Section 4 of P. L. 874 that handles certain situations involving federal contractors.

Net Burden Counts Related to Current Program

The current system overcounts by including the children of federal employees who would be living in the district even if these were no federal activity. The current system undercounts by excluding children who are in the district as a result of the induced economic effects of the federal activity. The current system overcounts by not subtracting from the count students who are out of the district but would be in it without the federal activity.

All methods of counting students are inherently incapable of accurately capturing the impact of the federal government on school costs in a community. No method that counts existing students can ever capture the students who would have been in the district without the federal impact. Further, such counts always capture some employee's children who would have been in the district even without the federal impact. Assuming temporarily that the children of non-federal employees (the induced employment in stores, etc.) create no burden because they cause as much tax revenue to be generated as they consume, the current student count method still overstates the impact of the federal government on school costs. This overstatement results from failing to give the federal government credit for keeping students out of District A while giving the federal government the full blame for moving them into District B and from the fact that student count include a number (what number is unknown and unknowable) of students who would be in the district's schools if there had been no federal activity.

While the magnitude of under and overcounting is impossible to estimate, in some extreme cases it seems reasonably clear that the counts produce totally inaccurate or totally accurate indicators of cost relationships. A good example of a highly accurate count occurs when the federal government moves, say, an Air Force wing from Okinawa to a school district in the United States. The federal children newly in the district are obviously there because of the federal activity. On the other hand, parents who commute 30 miles to an air base for civilian employment to supplement their farm income are highly likely to be living in the district even without federal impact.

From this analysis (and leaving induced effects for later consideration), it follows that

(1) Counts of the students whose parents work on federal property substantially overstate the burden of federal activities on school systems,

(2) The extent of the overcounting is unknown and unknowable, and

(3) Any significant arbitrarily chosen reduction in students counted will product an underestimate of burden in some districts.

There is reason to believe that the overestimate of federal impact that results from counting federally connected children is probably lowest in cases where a substantial percentage of the district's enrollment is federally connected and highest where a low portion is federally connected. The overestimate is also likely to be lower for military personnel than for civilian personnel. A situation where 2 percent of enrollment is federally connected may well indicate that the federal jobs available are a relatively low proportion of total employment and labor force and thus, that it is quite conceivable that those jobs have been filled by existing residents. On the other hand, a federal employment percentage of 50 percent would probably indicate that the federal government's requirements were in part met through migration.

MEASURING THE REVENUE ELEMENT

The preceding section sought to develop ways to measure the costs of education with and without a federal impact through estimating the effect of federal activities on enrollment. The second element in the net burden formula is the revenue measurement with and without federal impact.

Revenues of a school district consist of the following elements: (1) federal aid, other than impact aid, (2) state aid, (3) local tax receipts, and (4) other local receipts such as gifts, sale of property, etc. The problem in dealing with changes in revenues caused by federal activities is to determine how these revenues vary as a result of the federal impact and the increased number of children presumed to be associated with that impact.

Non-impact federal aid is paid to the district on the basis of a variety of factors such as disadvantaged pupils, demonstration programs, audio-visual programs and vocational education. In most districts these funding sources represent a relatively small portion of total expenditures. In general, federal aid per pupil is not likely to vary as a result of federal impacts upon the school district. Thus, the federal aid component of revenues can be ignored in the analysis which follows. Impact aid revenues are excluded from this analysis of revenue changes because it is the impact aid payment which the analysis seeks to calculate.

Other local receipts will also tend to be relatively small and constant on a per pupil basis. There is no reason to believe that the per pupil net proceeds of school lunch sales, for example, will be influenced by a federal activity in the area served by the school district.

State aid per pupil may be influenced by the additional children caused by the federal impact. In some states, state aid is paid on a flat per pupil basis, in which case the payment per pupil for the federally induced enrollment is the same as that for the non-federally induced pupils. In other cases state aid may be responsive to the tax base per pupil in which case the state aid payment would tend to offset part of any potential burden of the added enrollment on the school district. The problem of the interaction of the federal impact payment and state aid payments is treated elsewhere in this report. For present purposes it will be assumed that state aid per pupil is not affected by any increase in enrollment caused by the federal activities.

Thus, the key element in the analysis of the federal impact upon the revenues of a school district is the impact on local tax revenues. These local tax revenues are (ignoring minor differences for delinquencies on current taxes and back payments of prior taxes) the product of the tax base (e.g., taxable sales, taxable income, assessed value of taxable property) and the tax rate. Because the burden concept assumes that the federal government should not impose a higher tax rate on local residents by making them pay for federal impact, the only variable in the revenue side of the burden formula is tax base.

The With and Without Measurement

As is the case with students, there is no way to determine what the tax base of a district would have been if the federal government had never had an impact on it. Thus, there can be no way to subtract current tax base from the tax base that would have existed without the federal impact.

Any reasonable speculation indicates that major tax base improvements have been caused by federal activities in a number of locations. Certainly Arlington County, Virginia, has a much higher tax base with federal impact than it would have had without it. On the other hand, some situations exist where the federal impact has been to reduce tax base by buying land that otherwise would be private (and taxable), and/or inducing a disproportionate number of low paid federal (or private) employees to move into the district as in the case of certain ordinance storage installations.

The Incremental Measurement

Even if one cannot examine a with and without situation and subtract to find impact, it may be possible to develop a measure of impact on an incremental basis. There are a number of mechanisms through which a federal activity may contribute to tax base. These include

(1) The residences of federal employees

(2) The business property developed to serve the federal employees and the installation

(3) The residences of those who serve the businesses that provide goods and services to both the installation and the federal employees

(4) The businesses, industry and commercial activities, plus residences of those who serve those listed in (3).

A substantial literature has developed around measuring the indirect effect of a new industry or activity upon a local economy. That literature unfortunately indicates little consensus among economists on how large such effects may be either upon service burdens (e.g., providing schools, police, etc.) or upon revenues within a definable economic area.

Unfortunately, even if this literature reached any useful conclusions, those conclusions would not be relevant to developing a formula for measuring the economic impact of federal installations on school districts. This problem arises because in many states, school districts are substantially smaller than natural economic areas. For example, even if it were possible to measure the full economic (tax base) impact of Wright Patterson Air Force Base upon the Dayton, Ohio, standard metropolitan statistical area, there is no accurate way to allocate that impact among the fifty or so school districts in that area.

Again, however, it is possible to examine some extreme cases. The first extreme case is where a school district has absolutely no increase in tax base as a result of the induced economic activity caused by a federal installation. This case arises in the circumstance where a local school district has boundaries that are coterminous with the base itself. In such a case, all of the induced private activity (bars, restaurants, etc.) must take place outside the boundaries of the school districts. Several school districts just like this are major P. L. 874 recipients.

By contrast, it is also possible to identify districts where the federal impact on tax base is both substantial and favorable. Perhaps the strongest examples are those where the federal government has constructed an installation such as an aircraft plant which becomes occupied by a private concern while leaving some aspects of the plant as federal property. In some states, the private concern's leasehold interest in this non-taxable federal property is taxable along with privately owned machinery and work in process in the plant (to a degree).

Another incremental approach to measuring the revenue impacts of federal activities on local schools is the tax-loss approach. That approach presumes, in effect, that if an employee were not working on federal property he would be working on taxable property and thus that the federal government causes a tax loss. Alternatively, the tax loss approach seeks to indicate the federal impact by considering what tax would be raised on the federal property if it could be taxed. This tax-loss approach does not appear to be a reasonable method of determining burden. The problems of the tax-loss approach are detailed in Chapter 7 in connection with the payment rate for (b) pupils. In passing, it is worth noting that if the tax-loss approach is accepted, payments should only be made to the districts in which the federal activity is located.

Summary and Conclusions

No one knows exactly what the potential revenues of a school district would be in the absence of federal impact. On the one hand, it is possible that the federal government's action precluded private development that would have been a major contributor to revenues. On the other hand, the federal government may have induced more economic activity on taxable property than would have existed without the federal impact.

CANCELING EFFECTS IN THE NET BURDEN FORMULA

The previous pages have sought to deal separately with the cost and the revenue portions of the net burden formula. Another approach is to consider the two elements together and attempt to identify circumstances where the relationship between the two can be estimated. The logic underlying the current P. L. 874 program in effect uses this approach - or, more correctly, the current program can in part be rationalized by using this approach.

The Indirect Effects. One of the more attractive simplifications is to assume that the indirect effects of the federal installation upon enrollment (e. g., the child of the owner of the new restaurant in town) are exactly offset by the induced tax base (e. g., the restaurant plus the owner's home) so that the induced effects cancel each other out by making comparable change in both revenues and students. There is no a priori reason why this should be the case, and research on indirect impacts is inconclusive. Even if indirect effects were cancelling on a national average basis there is very good reason to believe that they would not be in most communities. For example, a combination of students and new property and income tax that would cancel in one state would not cancel in another because of major differences in tax laws between the two states.

The Residence's Value. Another simplification is to impute a value to the tax base of the residential property of persons who work on federal property and live in private property. Under the present program, it is assumed that these places of residence contribute half of normal tax revenues, so the payment for (b) pupils is one-half the payment for (a) pupils. This relationship was based upon national data indicating that approximately 50 percent of property tax revenues come from the taxation of residential property.*

Summary of Canceling Effects

While approximations of canceling effects of costs and revenues are very convenient and may be approximately correct on a national average basis, it seems very clear that the assumption of canceling effects when applied on a district by district basis are likely to underpay significantly some school districts while significantly overpaying others. One cannot assume that the tax base resulting from the indirect effect of federal activities will bear the same relationship to the number of pupils resulting from such activities as the tax base of the district "without" the federal activity would bear to the number of pupils "without" such activity. Unfortunately, it is (and always will be) impossible to say what tax base changes do occur because - again - one can never know what the tax base per pupil of any impact district would have been had there been no impact.

Likewise, one cannot say that the tax base per pupil of all districts would tend on the average to be twice as high as the tax base per pupil of all new students in the district whose parents work on federal property. While the present program assumes this, there is no real basis for accepting this assumption over others.

THE PROSPECTS FOR A NET BURDEN FORMULA

To this point in the chapter, we have sought to show that there is a formula for net burden that makes considerable sense - namely, that the federal payment should be the added costs caused by the federal impact minus the added revenues caused by the federal impact. We have also sought to show that neither the added costs nor the added revenues can be measured with any degree of accuracy because what would have been without the federal installation is unknown and unknowable for any particular district in the United States.

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*If this logic were applied using current data the relationship would be more like 60 percent attributable to residential property.

Some Propositions for Burden Measurement

There remains one avenue of formula construction to explore. Though we do not know the number of pupils that would be in a school district or the revenues in a district without the federal impact, nonetheless, we may know the relationship between tax base and pupils that would prevail if the federal government had had no impact. In fact, there are several reasonable assumptions to make about what that relationship might have been without the impact, even though we know in advance that such an assumption would invariably understate burden in some instances and overstate it in others (just as the present impact aid formula or no program at all would have overpayments and underpayments). There are basically four reasonable propositions about tax base in relation to pupils in the absence of federal impact. They are as follows:

Proposition One: If There Were No Federal Impact, the Tax Base Per Pupil of a District Would be the Same as the Average Tax Base Per Non-Federal Pupil in the United States.

This proposition indicates that the district would reflect United States averages if there had been no federal impact. Such a proposition is not logically totally unreasonable and in practice would result in nationally uniform payments corrected for higher rates of taxation in some districts and lower ones in others. Unfortunately, there is no convenient and reasonably equitable way of implementing such a concept because there is no operational definition of a national average tax base given the different tax sources (e.g., some states use income tax, some do not) of the various states and their differing definitions of taxable property and assessment procedures. This problem is explored in detail in an appendix to this report.

Proposition Two: If There Were No Federal Impact, the Tax Base Per Pupil of a District Would be the Same as the Average Tax Base Per Non-Federal Pupil in the State.

This proposition is more likely to approximate reality than a national average in that it recognizes regional and state differences in tax base per pupil. It also has the advantage of being quite workable - and proven as states use tax base per pupil in their foundation formulas for school aid in many states. There is a slight problem in the case of those districts near state borders that more nearly resemble districts in other states than their own but there is no practical method to avoid this problem either through a new program or through the current one.

Proposition Three: If There Were No Federal Impact, the Tax Base Per Pupil of a District Would be the Same as the Tax Base for Equivalent Non-Federal Pupils in that District at the Present Time.

This proposition is somewhat less appealing than the former ones, because it tends to give the district credit (or blame) for changes in assessed value that really are the result of the federal impact. For example, the fact that assessed value per non-federal pupil in Arlington, Virginia, is about three times the Virginia average is quite clearly the result of the federal government. Because given our burden concept, payment per pupil should be related to assessed value per pupil; this proposition tends to make its mistakes in the direction of overpaying the districts with favorable federal impact and underpaying the districts with unfavorable federal impact.

It is possible to construct a hybrid payment formula from this assumption; however, by relaxing the assumption that tax rate must remain constant. In such a circumstance, the assumption becomes that the burden equals the local revenue raised per non-federal pupil from local sources times the equivalent number of federal pupils. This approach (when there are enough non-federal pupils in a district to have it make sense) gives rise to a formula for payment like the current one except somewhat more equitable and easier to administer. In general, because a higher tax base per pupil tends to result in (1) lower tax rates and (2) higher expenditures per pupil, the use of local revenues rather than tax base reduces the advantage of the rich district by taking into account its lower tax effort and helps the poorer district by taking into account higher than average tax efforts.

Proposition Four: If There Were No Federal Impact, the Tax Base Per Pupil of a District Would be the Same as the Tax Base for Comparable Districts in the Same State.

In effect this proposition is one of the bases of the comparable district approach in the present law. The difficulty with the present law is that, in implementing the definition of comparables, it has defined them as comparable to what the district is now, considering the federal impact. For example, if a district would have been a small, poor rural district without the federal impact, but is a large rather rich district because of the federal impact, the comparable district rule indicates selection of a large rich district as the comparable district rather than small poor rural districts. Nevertheless, selecting comparables on any other basis involves the same types of assumptions made in the other propositions. For that reason, Proposition Four tends to be a poor reflection of any burden concept.

The Data Problem

As noted in various parts of this chapter, the current student-count methods that are confined to enumerating children whose parents work or live on federal property does not provide an accurate, or even a reasonable, measure of the number of pupils residing in a district because of a federal impact. Obviously such counting methods can never indicate the pupils who would have lived in a district, but do not do so because of a federal impact that caused them to leave the district (e.g., by federal purchase of land on which they might have lived or worked or by acceptance of federal employment in some other district). Likewise, this chapter has shown that the measurement of the burden of federal installations requires an accurate assessment of what the tax base of the district would have been had there been no federal impact. There is no conceivable way to measure or even speculate very intelligently about the tax base of such areas as suburban Washington, D. C., San Antonio, Texas, or Limestone, Maine, on an assumption that the federal government did not affect them. The character of these places, and others like them, is a result of the federal installations and to indicate what they would be today without those installations is speculation.

For those readers who, despite these problems, believe that it should be possible to construct an analysis of federal impacts that proceeds along the lines of methods that are used to estimate the impacts of opening or closing a military base or major industry two comments are in order. First, those methods that deal with "before" and "after" situations will never accurately represent the situation had the installation never located in the community. For example, an analysis of the economy of the Lawton, Oklahoma, area on the assumption that Fort Sill is closed would indicate a much different kind of economy than an analysis that dealt with what the Lawton economy would have been like had Fort Sill been located in Oklahoma City rather than Lawton when it was first constructed.

Second, the methods of "before" and "after" analysis simply cannot be applied in most states because the economic data required to accomplish such an application are not available at the level of the school district, which in most states is a smaller unit than a county. For individual school districts reliable data (or unreliable data for that matter) are not available on such key indicators as population (except in census years), income, industrial base, assets, purchases, and sales or other key economic variables. Thus even if a working model of burden could be constructed using standard economic techniques*, it could never be implemented because of lack of data.

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*The characteristics of such a model are described in a Battelle working paper dated February 24, 1969, on file with the Office of Education. A much more detailed paper on economic impact, "The Federal Burden on Schools", has been filed with the Office of Education as a working paper.

SUMMARY AND CONCLUSIONS

The clear import of the analysis in this chapter is that an appropriate way to measure the net burden of federal activities on local schools can easily be developed at the conceptual level. This approach simply compares the revenues and costs of the school system as they would have been without the federal impact to the revenue and cost situation as they are with the federal impact. Unfortunately, implementation of the conceptually correct net burden concept is impossible as the situation of federally impacted districts if they had never had a federal impact is both unknown and unknowable. Thus, there is no feasible way to draft a perfect formula for impact aid that accurately measures the net burden of federal installations.

All that can be concluded from this analysis is that present student-count methods and payment rates will tend to overstate the net burden of federal activities in some cases, but not necessarily in all of them. In general, the lesser the federal impact (as measured, for example, by the percentage of students that are federally connected) the more likely the present P. L. 874 program is to overstate the federal burden.

Given this analysis of net burden concepts, the examination of impact aid can turn to the possibilities of eliminating the P. L. 874 and P. L. 815 programs completely and the alternative of making impact aid payments to states rather than to individual school districts or making payments in lieu of taxes to school districts. These alternatives are addressed in Chapter 3.

CHAPTER 3: SOME ALTERNATIVES TO IMPACT AID

The purpose of this chapter is to consider some major alternatives to an impact aid program. These include eliminating the program entirely, making payments in lieu of taxes, and making payments to states rather than districts.

THE NO-PROGRAM OPTION

The Pure Form of the Option

One obvious option in dealing with the impact of the federal government on local school systems is to have no program of impact aid at all. In the pure form of this option, the federal government would consider education of federally connected children to be the sole responsibility of the states and their political subdivisions. The current impact aid programs of the Office of Education (P. L. 874 and P. L. 815) would be repealed and individual federal departments would be prohibited from adopting impact aid programs of their own. The no-program option would, to be consistent, eliminate special departmental programs such as the Atomic Energy Commission (AEC) payments to communities with major AEC facilities. Also, to be consistent acting under this option, the federal government should also discontinue those shared revenue and in-lieu-of-tax payments that benefit schools. The programs affected would include all or part of shared revenues from national forests, submarginal land of the Soil Conservation Service, timber sale proceeds from public lands, proceeds from certain mineral leasing arrangements and Tennessee Valley Authority payments to local schools. In addition, a number of special smaller programs would be affected.

Consequences of the Pure Form of the Option

The pure form of the no-program option fails to achieve any objective of impact aid. It does not provide good schools for federal pupils; it does not meet the net burden of federal installations; and it does not provide general aid in any form. The pure form of the option has severe consequences for certain categories of pupils reached by the present program. These consequences are discussed in the following paragraphs.

Under Section 6 of P. L. 874, impact aid is used to pay the costs of operating schools on military bases that are run by the military departments rather than by local educational agencies. Without impact aid these schools would close and there is no reason to assume that neighboring school districts would accept the pupils, nor that they would be financially capable of educating them even if they agreed to accept them.

In a number of cases, schools physically located on a base are run by a local educational authority whose effective attendance (and taxing) area is comparable to that of the base. The students in these schools are almost entirely dependents of military personnel who live and work on the base. There is essentially no tax base in these districts as the base and the on-base housing cannot be taxed. Without impact aid these schools would close and there is no reason to assume that neighboring school districts would be financially capable of educating pupils from such installations even if they agreed to accept them.

Although the legal situation is cloudy in some states and for various types of federal property, states can in some circumstances refuse to provide free public education for some students resident on federal property.* In such cases, some districts educating federal pupils living on military bases, in national forests and on other forms of federal property could be expected to refuse to educate such pupils unless their parents paid tuition.

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*For a brief summary of some of the cases involving the right of a federal pupil to free public education under state law, see Labovitz, *op. cit.* It is conceivable that a test case might be won by federal parents in the Supreme Court under an application of the "equal protection of the laws" provision of the Constitution. Even if this were possible, the situation described above would exist during the several years of litigation required to produce this result.

(43)

Currently, impact aid represents the bulk of the federal efforts to provide reasonable educational opportunities for Indian children. Termination of impact aid would eliminate a large percentage of the budgets of school districts that serve primarily Indian pupils.

Where a federally connected pupil lives on private rather than federal property, the states do not have the option of refusing to provide education for them. However, this right extends only to providing free public education – not to the quality of that education. In some school districts (particularly those where both debt and local tax rates are limited by state constitutional provisions or statutes), the no-program option in its pure form could cut per-pupil expenditures from levels approaching the national average to levels closer to half the national average. Translated into educational inputs this means, roughly speaking, classes at about twice their present size (if classrooms were large enough) or split sessions of shortened duration, halving of instructional materials and textbooks, and reductions in pupil transportation and other services.

These impacts on pupils would readily be translated into impacts on federal agencies. Agencies desiring to locate employees on federal property would find great difficulty in trying to recruit employees with dependents. The attractiveness of a military career would be significantly reduced, so that the military departments would have to make sizable increases in military pay or accept a lower standard of selection. All of these consequences would seem to indicate that by any reasonable standard of evaluation the pure no-program option is clearly not attractive.

A Modified No-Program Option

The pure form of the no-program option assumed that the separate federal departments would be prohibited from adopting impact aid programs on their own. Another approach to the impact aid problem would be to repeal the present impact aid program administered by the Office of Education and let various federal departments make arrangements for the education of dependents of their employees.

The consequence of adopting this approach would be a resumption of the situation encountered before P.L. 815 and P.L. 874 were adopted, namely, a proliferation of special educational assistance programs within the budgets of various federal departments. Despite attempts to control the situation, it is reasonable to expect that departments would demand and achieve appropriations for such purposes if P.L. 874 and P.L. 815 were repealed. In fact, the Army Corps of Engineers has already reacted to the financial stringency in P.L. 815 by seeking and obtaining funds for school construction within its own budget to deal with a special impact situation. In addition, the Atomic Energy Commission funds impact aid type programs for the community of Los Alamos, New Mexico, and Oak Ridge, Tennessee, and the Bureau of Indian Affairs (BIA) provides some Johnson O'Malley funds that, in practice, supplement P.L. 874 payments.

The nature and costs of the departmental programs that would evolve, after a hectic period of legislation in the Congress and chaos in the school districts, cannot be predicted with certainty. However, it is reasonable to speculate that Atomic Energy Commission would expand its special programs and that the Bureau of Indian Affairs would have to provide the equivalent of P.L. 874 to public school systems educating reservation Indians or accept more students into its own schools. The Corps of Engineers and Bureau of Reclamation could be expected to provide school assistance in areas surrounding construction camps, but the amounts of money involved would probably be small.

The greatest expenditures to replace P.L. 815 and P.L. 874 would be incurred by the Department of Defense. That department would continue to operate those schools currently operated with P.L. 874 funds by the military departments and to assume financial and perhaps operating responsibility for those on base school systems that are operating primarily (and sometimes exclusively) for military dependents. The Department would probably have to assume financial responsibility for its dependents living on base even in school districts that included substantial numbers of off-base military dependents and non-federally connected pupils. The districts currently educating these 3(a) military dependents would also be those who educate a substantial number of the 3(b) military dependents and thus would be those most affected by the termination of P.L. 815 and P.L. 874.

As was the case with the special departmental programs in effect before 1950, the resulting complex of departmental policies would undoubtedly differ considerably in the characteristics of students covered, the method for calculation of payment, and the degree to which appropriations matched the sums considered by the districts and departments to be needed. These results would follow from the fact that the programs would be developed for different purposes, by different individuals, in different departments, and reviewed by different committees in the Congress. Some of the programs would probably take the form of a negotiated payment related to need along the lines of the present AEC program and Section 4(a) of P.L. 874. Some of the programs would involve direct operation of schools by the federal government along the lines of the present base schools funded under Section 6 of P.L. 874. Other of the programs would probably involve tuition-like payments to school districts, while others might resemble the entitlement calculations of Section 3 of P.L. 874. Still other programs would resemble the contract payments of the Bureau of Indian Affairs. A school district might find itself applying for assistance from several different agencies using different forms, different auditing procedures, and receiving different per pupil payments.

The resulting complex of departmental programs would probably do a relatively good job of providing schools for federal pupils in the areas in which it operated. However, the departmental programs would be affected by having to share in any budgetary pressures felt by the overall departmental activities of which they would be a part. The departmental programs would not be the result of a consistent attempt to calculate and meet all the net burdens of federal installations and, therefore, would be unlikely to resemble a program that precisely met this net burden. Because the programs of various departments would be inconsistent with each other, it would be impossible for all of them to reflect precise net burden measures, even if some of them did. Adoption of these departmental programs would splinter responsibility for the second largest federal aid to education program throughout the agencies of the federal government, rather than concentrating it in the federal agency concerned with overall federal educational policies.

In summary, the no-program option would re-create the chaotic situation of multiple federal impact programs that existed before the current program was enacted in 1950. The no-program option does not provide for the federal government to meet the burdens it creates on some school systems, is administratively undesirable, and would have adverse educational consequences in the heavily impacted districts. For these reasons, the no-program option is considered unacceptable.

PAYMENTS "IN LIEU OF TAXES" TO SCHOOL SYSTEMS

The Option and Its Consequences

Some of the representatives of school districts contacted during this study indicated that the best federal approach to aiding schools in federally affected areas would be to pay taxes, just like any other property owner in the district. This suggestion is not new, it has been made for many years by other property taxing authorities (e.g., municipalities and counties) as well as by school officials.

The in-lieu-of-taxes option would work by having legislation passed at the federal level that would authorize agencies owning real and personal property in the United States to pay taxes to local units of government for property which would be taxable if not federally owned. Safeguards would have to be written into the legislation to keep communities from assessing federal property at a higher percentage of value than privately owned property and to ensure that the local communities did not impose burdensome record-keeping requirements on the federal government. Appropriations would be made under this authorization either to the property-owning agencies, or to a single federal agency such as the General Services Administration, which would then pay regular tax bills just as owners of private property pay them.

One frequent objection to payments in lieu of taxes is that such a system would be impossible to administer because of the difficulties in agreeing upon the value of some federal properties. Battelle has examined this argument and finds it insufficiently compelling to provide a basis for rejecting the concept of payments in lieu of taxes. Basically, the problem of assessing federal property is comparable to that of assessing certain types of business property. A federal dam is comparable to a private dam, a ballistic missile comparable to a railroad track - the entity has little value in any use other than the use to which it is being put and no readily calculable market value but does have an acquisition cost which is known and against which depreciation can be computed.

Perhaps the best indication that in lieu of tax payments could be calculated by applying existing tax rates to an assessed value of federal property is evidenced by some states which carry tax exempt property (including federal property) on their tax rolls at exact values, even though they do not impose a tax on these properties. Another good indication of the practicability of such calculations is the fact that many heavily impacted school districts, in cooperation with base commanders and other custodians of federal property, have made calculations of how much more money their district would get if the federal government paid taxes than it gets from impact aid.

It would be impossible to estimate accurately the total education assistance provided by an in-lieu program even if the taxable value of federal property were known with certainty. Assuming that the national average aggregate tax rates (roughly estimated) for school purposes were applied to a likely taxable value of federal property, such a program would probably cost in excess of $1 billion annually. However, the tax rate in any district is not independent of the value of the taxable property in that district. Many large industrial facilities enjoy very low tax rates, because all of the needs for a fairly lavish scale of public expenditures can be met in a small jurisdiction with a very low tax rate. To take an extreme case, consider a $200 million federal dam and reservoir located in an isolated rural area. The school district might have 200 pupils and a tax base of $20,000 (true value) per pupil to which it applied an effective tax rate of 1-1/2 percent, giving local revenues of $300 per pupil. Making the federal dam taxable would make the tax base $1,020,000 per pupil, so that the 1-1/2 percent tax rate would raise over $15,000 per pupil, enough to finance a pupil teacher ratio of one pupil to every two teachers. Obviously, this district would lower its tax rate substantially and the effective tax applied to the federal property would be lower than any national average tax rate.

Making an extremely rough estimate of these types of changes and guessing at the various state assessment procedures to be applied to federal property, it would seem that federal payments in lieu of taxes for schools alone would tend to approximate the costs of the current impact aid program (excluding public housing entitlements).

Evaluation of the In-Lieu Option

The in-lieu option would be an excellent means of providing good education for federal pupils that happened to live in the same school district as the property but a very poor means (in fact, none at all) for the other federally connected pupils. For certain categories of federal pupils, such as military dependents in on-base housing, the revenues to a district per pupil undoubtedly would be greater than the impact aid payments under the current program. However, in the case of pupils living on public lands or on Indian reservations, the payments from the in-lieu option frequently would not be as great as those under impact aid. For those areas located near a base not within the geographic boundaries of the district, in-lieu payments would provide no assistance.

The in-lieu option would fail to meet the net burden of federal installations, unless that burden were defined as resulting solely from the fact that the federal government doesn't pay taxes. A problem of using in-lieu payments to meet net burden on school districts would arise with two school districts in comparable geographic and economic relationship to a military installation. Even if the two districts had the same number of 3(b) pupils, one district would receive all of the in-lieu payment while the other district would receive nothing in compensation for the federal impact.

The Option in Relation to Other Evaluation Criteria

Payments in lieu of taxes have some appeal in terms of federalism. That appeal is that, if each level of government pays taxes to others, no level of government can effectively deny the revenue sources of another. On the other hand, as "the power to tax is the power to destroy", intergovernmental tax immunities have long been cherished in the United States.

The economic rationality of payments in lieu of taxes can be argued from a number of perspectives. From the perspective of resource allocation to and within the federal sector, payment of taxes removes some of the bias against doing things through private enterprise (whose prices include taxes) rather than government agencies (whose prices do not include local taxes). However, for the federal government to begin to pay property taxes must be judged as an extention of the revenue-raising potential, and, thus, inequities inherent in a tax that is probably already inequitable at a single rate,* and is clearly inequitable when applied at hundreds of different rates by hundreds of school districts throughout a single state.

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*Netzer, Dick, Economics of the Property Tax (Brookings, 1966).

16

Payments in lieu of taxes would unquestionably be expensive, particularly if the concept were extended to municipal, sewer district, county, library district, and similar property tax levies. It is doubtful that payments in lieu of taxes would be as good a device for fiscal equalization as other alternatives, such as revenue sharing, available. It is also doubtful that payments in lieu of taxes represent the most productive utilization of federal dollars for elementary and secondary education. Thus, in terms of cost and educational effectiveness, in-lieu payments are not attractive.

DIRECT PAYMENTS TO STATE GOVERNMENT

During this study, a number of individuals have suggested that impact aid payments should be made to states rather than school districts. Under such a plan, the states would be permitted to use the funds to assist any district in the state but presumably would use at least part of the money to establish a new program of assistance that would directly or indirectly provide assistance to many of the districts that now receive impact aid directly from the federal government. Such a plan would have several advantages. It would ease the administrative burdens of calculating entitlements, because data on federal employment could be used to determine entitlements of states, even though they cannot be used to calculate the entitlement of districts.* Payments to the states would be more consistent with concepts of federalism that emphasize state responsibility and discourage direct federal payments to individual units of local government.

The Economic Rationale of Payments to States

The primary difficulty with the concept of making all impact aid payments to states is that there would be little if any economic rationale for whatever payments were made. From the analysis in the preceding chapter it will be recalled that the appropriate payment to offset the net burden of federal activities would seek to calculate the number of students added to enrollment, multiply that number by the costs of educating each student, and pay the difference between that product and the gain in school revenues resulting from the federal impact. The same difficulties in determining the situation "without" federal activities exist in the case of states as in the case of school districts. However, the inherent overcompensation of an impact aid formula based upon student counts becomes more apparent in the case of states.

In the case of the 3(b) students, a strong argument can be made that most of the civilian employees of the federal government — particularly, the large category of civilian employees working at military bases — would be residents of the state whether they worked for the federal government or not, in which case their federal employment does not cause additional students to be living in the state. In the case of other 3(b) students and many of the 3(a) students, the asymmetry of the student-counting procedures becomes a particularly significant. If a New York citizen with two school-age children accepts federal employment as a military doctor and is moved to an air base in Texas, the student-count procedure gives Texas credit for having been burdened by the costs of educating his family. However, that same move reduces the educational costs of New York State much more than it is likely to have reduced the tax base in New York. Thus, any program of assistance to states based upon a count of children of federal employees will significantly overestimate the number of students for whom the federal government should assume responsibility.

In considering the impact of the federal government on school revenues at a state level, it must be recognized that the situation may well be quite different from the situation considered at the level of a school district. Because of the division of states into many school districts, situations do arise in which the costs of educating federally connected students fall upon one school district, while the economic stimulus of the federal activity takes place in another school district. Under these circumstances, the federal government pays impact aid to the burdened districts, but cannot collect a special tax from the benefited districts. Thus, the program of payments of impact aid are financed from general tax revenues. Viewed at the level of the state, however, it would be incorrect simply to base the state entitlements upon the summation of all the net burdens of federal installations on certain school districts without subtracting the net benefits of federal installations to other school districts in the same state.

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*On a state basis there is a reasonable correlation between place of employment and place of residence, but this correlation breaks down at the school district level. There is a very good chance that a federal employee working in California also lives and sends children to school in that state. There is much less chance that he resides in the same school district in which he works.

Put in more practical terms, it is quite reasonable to find that the federal government has placed a special burden on the school systems of China Lake, California, Norfolk, Virginia, or Bellevue, Nebraska. It is doubtful however that the federal installations in those states have left the states of California, Virginia, and Nebraska worse off economically than they would have been without those installations. While one cannot accurately calculate what the situation would have been in those states if there had never been federal installations in them, it is as reasonable to assume that tax base per pupil in those states has been increased as it would be to assume that tax base per pupil has been decreased by the federal impact.

The State of California, for example, can claim that it should be paid federal impact funds because the federal government has caused an adverse economic impact resulting from federal activities. On the other hand, the State of Vermont can contend that it should be paid federal aid funds because the federal government takes funds from Vermont residents through the federal tax system and spends those revenues to pay salaries of federal employees in California. This later contention would suggest that, at the state level, an impact aid program might be used to compensate those states that do not have federal installations rather than the states that do.

Impact aid deals with a problem that exists because states are fragmented into small districts for educational purposes and those districts rely primarily upon local tax sources for their educational programs. If the federal government is willing to assume either that states are not thus fragmented or that states rather than the federal government should handle the effects of that fragmentation, then the appropriate impact aid policy is, for most states, to have no federal program at all and let the states raise revenues in districts that benefit from federal installations for the use of those districts that are burdened by those installations.

Another important economic aspect of the federal burden on states stems from the difference in taxing sources between state government and individual school districts. Although there are exceptions, local school finance in the United States is generally based upon taxes upon property. The property tax does not reach the places of employment of federal employees because the federal government is not liable for local property taxes. The property tax does not reach the residences of military personnel and others living on federal property for the same reason. Although there are exceptions, state tax sources generally concentrate upon income and sales taxes on individuals and such special tax sources as excises on liquor and cigarettes, mineral extraction taxes, and taxes upon public utilities. These tax sources are not affected by the tax exemption of federal property. For example, in the case of a civilian federal employee the liabilities for sales and income taxes are comparable to those of a non-federal employee.

Direct Payments to States Viewed as an Education Program

As an alternative to considering payments to states in terms of the economic impact of the federal government on state school revenues and costs, one might consider such payments in terms of the degree to which they would correspond to the distribution that might be made to states under other potential federal education programs or revenue sharing. The data for this analysis are provided by Table 3.1.

TABLE 3.1. SELECTED FINANCIAL DATA OF REPRESENTATIVE STATES

State	Impact Aid FY 1968, $000	Impact Aid Per Pupil in ADA[a]	Tax Effort	Current Expenditures Per Pupil, 1967-68	Tax Capacity Personal Income Per ADM[a]	Relative Federal Impact
Arkansas	2,635	6.36	4.5	441	9,114	2.48
California	76,433	18.30	5.0	685	14,630	5.35
Vermont	102	1.19	5.6	638	12,221	0.74
New Mexico	9,907	37.40	6.0	536	8,998	14.70
Ohio	10,348	4.71	4.3	591	13,743	1.50
New York	16,297	5.37	5.1	982	19,773	1.13
Georgia	12,207	12.20	4.5	498	9,988	4.81
United States	464,712	11.10	4.7	619	13,658	3.58

[a] Both average daily attendance (ADA) and average daily membership (ADM) are measures of the number of pupils in a district or state.

Source: See text.

This table selects a representative group of states and shows the characteristics of those states that might be relevent to viewing direct payments to states of impact aid funds as a federal education program. The first column shows impact aid entitlements under P. L. 874 for fiscal 1968 as reported in the Annual Report of the Commissioner of Education on the Administration of P. L. 81-874 and P. L. 81-815. Assuming that the same payments would be made to states as were made to the total of districts in the states, the second column shows the approximate amount per pupil that each state would receive.* Direct payments to the states would initiate a program that provided over 30 times as much assistance per pupil to New Mexico as to Vermont and about 15 times as much per pupil to California as to Vermont. It is reasonably clear that the relative educational problems of the two states could not justify this disparity.

A program of direct payments to states would not accurately reflect the differences in tax effort (local and state revenue for public schools as a percent of personal income, 1966) as an examination of the third column of Table 3.1 will readily indicate. A similar comment applies in the case of measures of tax capacity such as the one shown in column 4 of Table 3.1. The conclusions to be drawn from this table is that impact aid rewards the states in a very haphazard way – totally unrelated to educational needs or (so argues the preceding pages) to statewide economic impact.

What Formula Could be Used to Calculate State Payments?

The final column of Table 3.1 shows the relative federal impact for each state, calculated by dividing the sum of fiscal 1968 federally connected pupils (counting the (b) pupils at 50 percent) by the total average daily attendance of each state. If the federal payments were made to states on the same basis as to districts, all states would be eligible because they would meet the present minimum requirement of 400 federally connected pupils. However, if a threshold for eligibility of 3 percent of total ADA were applied to states, some states would not be eligible for assistance at all. Because there is no good economic or educational rationale for distribution of impact aid funds to states rather than districts, there is no clear way to construct a formula for the distribution to states that would appear equitable.

Another problem arises in connection with determining what requirements would be placed on states to "flow through" a certain portion of assistance to heavily impacted districts. If no "flow through" is used at all, the resulting program may do a very poor job of providing good education for federal pupils. If, on the other hand, a "flow through" provision could be designed that would ensure that the districts that "really needed" impact aid would be provided such aid through the states, then it would appear appropriate for the federal government to use that provision as its impact aid formula for districts and make no payments to the states.

Indirect Payments to State Government

There are ways of providing impact aid funds that accomplish indirectly the results of direct payments to states. To take an extreme example, until very recently there was no prohibition in the impact aid legislation to prevent a state from reducing its payment under state aid by the amount the district received from the federal government as impact aid. Assuming that state payments were larger than federal payments in all districts, and that the state would offset all of the federal payment, it would be possible for a state to "capture" the full amount of the impact aid payments by reducing its state aid costs. The interaction of state aid and impact aid formulas is explored in more detail in a later chapter of this report.

SUMMARY AND CONCLUSIONS

This chapter has examined three major alternatives to an impact aid program of the current type. The option of discontinuing the present program – or replacing it with a group of impact programs designed, administered and budgeted by individual federal agencies – was rejected because it would fail to provide good schools for federal pupils and would, in many cases, fail to offset the burdens of federal installations on school districts. The option of payment of in-lieu-of-tax payments would have similar

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*The data used for this calculation were obtained from the National Education Association publication, Rankings of the States, 1968.

49

disadvantages in many districts where there would be no federal property to tax. That option would also tend to aggravate the already significant problems stemming from heavy reliance upon property taxes for educational finance. The option of making direct payments to states was rejected because such payments could not be justified on either economic or educational grounds. In addition, it was noted that the current impact aid program - when viewed at the level of the states - allocates benefits and burdens in a way not consistent with normal measures of educational need.

The next chapter considers another option - continuing the present impact aid program.

CHAPTER 4: PROBLEMS OF THE PRESENT PROGRAM

INTRODUCTION

The preceding chapter indicated that options of having no impact aid program at all, paying districts in lieu of taxes, and paying directly to states were all unsatisfactory for various reasons. This chapter considers another option – continuing the current program without change. A few school superintendents feel that the present program is ideal and that tampering with it in any way might not improve it. To these superintendents all of the problems of impact aid are traceable to the fact that Administration after Administration has tried to make changes in the authorizing legislation to cut the costs of the program and have recommended less than full funding. To these superintendents, if full entitlements were paid on time under P. L. 874 and all eligible P. L. 815 projects were funded, impact aid would work quite well – better than any alternative program they can think of. For the purposes of treating the current program as an option, it is assumed that full entitlements would be paid on time. The consequences of less than full funding are analyzed at the conclusion of the chapter.

Battelle devoted a substantial portion of its total research effort toward identifying problems with the current impact aid program and in exploring ways to avoid those problems. The process of identifying problems took three forms. First, Battelle undertook to analyze the program in the abstract, trying to relate it to the economic impact of federal installations, to criteria for evaluation, in relation to other educational programs, in relation to educational needs and for internal consistency and administrative simplicity. Second, Battelle collected data about the program and its impact, primarily through the collection of financial data from school districts through a questionnaire and field visits and from state educational agencies. Third, Battelle conducted a major portion of its analysis of problems with the present program by listening to those who have to live with that program. By questionnaire, Battelle asked every recipient district what they thought of the program and whether and how they thought it could be improved. By questionnaire, Battelle asked the personnel of state education agencies in every state what they thought of the program. By personal visits, Battelle discussed the program with representatives of state education departments, Office of Education officials, other Executive Branch personnel, with interest groups in the educational field and, congressional staff members, and with representatives of districts receiving impact aid.

One of the more gratifying aspects of this research was the degree to which the problems reported by those experienced with the program and Battelle's analysis of what those problems were likely to be began to converge. Early in the research the problems reported by school districts in questionnaires tended to be the same as those that Battelle through analysis was discovering. Later in the research when analysis indicated that a certain type of problem would be found in a district of certain characteristics, the district's financial data or interviews tended to confirm the analysis.

The following discussion deals with some of the problems of the current legislation (assuming full funding). To place this analysis of problems in the proper framework it should be understood that "a problem" can be said to exist when P. L. 874 or P. L. 815 produces results that are inconsistent with achievement of impact aid objectives or fail to meet other evaluation criteria. Thus, some categories of problems may not appear as problems to those not concerned with a particular objective, or not willing to use a particular evaluation criteria. The recitation of a series of problems encountered with P. L. 815 and P. L. 874 does not necessarily indicate that the legislation is a poor option for meeting impact aid objectives. If no other option can meet the problem either, then the present program is not necessarily undesirable. The problems associated with the current impact aid program have significance only when compared to the problems associated with having no impact aid program at all or to the problems associated with some other impact aid program. The chapters following this one seek to develop the characteristics of an impact aid program that would avoid many of the difficulties inherent in the current program.

CHARACTERISTICS OF PRESENT IMPACT AID RECIPIENTS

Battelle's research plan involved collecting considerable financial data from recipients of P. L. 874. The primary purpose of that data is to enable Battelle (or others) to calculate the federal budget costs and (the other side of the same coin) the entitlements of individual districts under various new payment formulas that might be adopted. These data are not directly relevant for the development of a new impact aid

(51)

formula,* but can be used to develop, as a by-product, some information that indicates some problems of the current program. Two of the most relevant of these by-products are discussed below.

Major Payments to Districts With Slight Federal Impact

Many individuals familiar with the impact aid program tend to think of the program in terms of such heavily impacted areas as school districts serving military bases. In fact, these heavy impact situations characterize only a small percentage of the impact aid recipients. For every district of this type there are several of a quite different type. For example, a significant number of the districts involved in impact aid are small suburban or rural districts located some distance from the nearest federal installation. A small percentage of parents in the district commute to one or more federal installations and a small percentage of the students are thus counted as federally connected.

To indicate the importance of these light impact districts in the impact aid program Battelle has constructed Table 4.1 which relates the number of districts and the amount of entitlements in 1967-68 to the impact of the federal government as measured through the student counts. Reflecting the P.L. 874 concept that the (b) students are a 50 percent federal and 50 percent local responsibility, relative impact was calculated by summing all of the (a) students and half of the (b) students and dividing by the total of all students in the district.

TABLE 4.1. RELATIVE IMPACT OF P.L. 874 RECIPIENTS

	Percentage Of	
Relative Federal Impact, %	Districts Receiving P.L. 874, %	Entitlements, %
0-2	10.8	5.8
2-4	30.0	13.8
4-6	15.4	8.7
6-8	10.1	6.8
8-10	6.4	4.7
10-15	9.4	11.9
15-25	8.6	23.4
25-35	2.0	7.0
Over 35	7.3	17.9

Source: Battelle calculations.

This table shows clearly that by far the largest proportion of P.L. 874 districts are those that have relatively slight federal impact. About 55 percent of the districts that receive assistance under the program have less than a 6 percent relative impact as defined above.

Some Evidence of Probable Overpayments

The theory of federal impact underlying P.L. 874 that the federal government causes increased educational costs (by adding students to a school system) without providing the resources to pay for them (in the form of added tax base) would indicate that the assessed value per pupil in heavily impacted districts would tend to be lower than in less impacted districts. To check this and other hypotheses, Battelle developed a profile of P.L. 874 recipients. The key findings of that profile are reported in Table 4.2.

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*For example, the Battelle analysis indicates that very rich districts (districts with high tax base per pupil) should not receive impact aid funds. This analysis is not affected by whether the number of such districts currently receiving impact aid is 10 or 1,000. The number of such districts is relevant in determining the federal budget implications of terminating assistance to them, but Battelle undertook to develop an impact aid program that accurately compensates school districts for the net burden of federal installations without trying to reach any particular floor or ceiling in terms of impact of the recommendations on the federal budget. The data developed for determining the cost implications of the Battelle recommendations were therefore provided to the Office of Education separate from this report.

TABLE 4.2. PROFILE OF P.L. 874 RECIPIENTS BY EXTENT OF FEDERAL IMPACT, 1976-68

	All Districts	Districts With This Percentage of Federal Students: 0-3	3-6	6-12	12-25	25 or More
Students (ADA)	6271	10,556	5,149	3,914	5,962	2,639
Local Contribution Rate, $	338	348	335	327	330	352
Pupils Per Teacher	23	23	23	23	23	21
Relative Salary Index	1.83	1.93	1.79	1.76	1.76	1.87
Real Tax Rate, % of base	1.09	1.19	1.16	.98	.99	.97
Real Assessed Value Per Pupil, $ thousands	46.1	44.9	56.1	40.6	49.0	28.8
Real Assessed Value Per Non-Federal Pupil, $ thousands	57.9	45.9	58.7	44.4	59.2	117.7
Operating Expenditures Per Pupil	623	634	610	598	619	683

Source: Battelle calculations.

The profile in Table 4.2 was developed by determining the relevant characteristic for each recipient and then finding the average for each group of recipients. Thus, it is not a weighted average. The data used represent the questionnaire responses of about 2,900 recipient districts that account for approximately 85 percent of the 1967-68 P.L. 874 entitlements. The relative salary index was developed by taking responses to a question on salaries and averaging the codes assigned to the answers.* A higher index reflects a combination of (a) less reports of relatively lower salaries in these districts and (b) more reports of relatively higher salaries.

These data indicate that by comparison to lightly impacted districts, the very heavily impacted districts tend to be able to combine local resources, state aid, and P.L. 874 to maintain a higher standard of education (measured by pupil teacher ratio and expenditures per pupil), while making a lower tax effort.

In making these calculations, Battelle adjusted both tax rates and tax base to comparable terms (real values) by utilizing the assessment ratios reported by the districts. Thus a district reporting a tax base of $20,000 per pupil and an assessment ratio of 50 percent would be attributed a real tax base of $40,000 per pupil. These adjustments, which are necessary for comparisons among districts, affect all districts. In determining the non-federal pupils in the district, all of the (a) pupils and one-half of the (b) pupils were subtracted from total pupils.

The data on assessed value in Table 4.2 tend to conform that federal activities can have the effect of lowering the assessed value per pupil. This impact is particularly noticable in the districts with more than 25 percent federal impact, and not noticable at all in the districts with 3-25 percent relative impact. The real assessed value per non-federal pupil indicates the tax base allowed to stand behind local pupils if the federal government assumes responsibility for half of the (b) pupils and all of the (a) pupils. The fact that this tax base measure is higher in the heavily impacted districts suggests that there may be some stimulus to tax base from federal activities and/or that the 50 percent ratio of payments for (b) pupils may overstate federal responsibilities for those pupils.

PROBLEMS WITH THE CURRENT PROGRAM IN MISESTIMATING THE NET BURDEN OF FEDERAL INSTALLATIONS

As was indicated in analytic terms in Chapter 2 the current impact aid program will tend to misestimate net burden in a number of cases. Some of the more important of those cases are detailed below.

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*Most systems in your area offer salaries (1) higher than yours, (2) about the same, (3) lower than yours.

Case 1: The Federal Government Creates a Wealthy Community

One circumstance of federal impact occurs when the federal government creates a new (or expands significantly an existing) major federal installation in an area that has little economic growth potential without the federal activity. Under such a circumstance the federal government indirectly provides much better wages for existing residents through both direct employment by the installation and indirect employment in local stores and service operations.

The best examples of this result can be found in the area surrounding the nation's capital. Currently the counties surrounding Washington, D. C. are some of the richest in the nation in per capita income terms. It seems a reasonable speculation that had the nation's capital continued to be in Philadelphia, Pennsylvania, the Washington, D. C. areas would have a much different income level than at present. At best the small ports of Georgetown and Alexandria might have expanded into significant eastern seaboard ports with some manufacturing. This would indicate that without the nation's capital, the economics of the area might resemble that of Baltimore, Maryland, or Newport, Virginia. In fact, because of the relatively high incomes of the higher level government employees that live in Washington, the associated activities of reporting services and trade associations and the resulting induced activities in restaurants, clothing stores, and real estate, the incomes of Washington area residents are far above those found in either Baltimore or Norfolk. These higher incomes are reflected indirectly in higher property values and thus greater taxpaying capacity in the school districts serving the area. Similar arguments can be made for such places as Huntsville, Alabama (Redstone Arsenal), and the Florida areas near Cape Kennedy. In these cases, assuming no federal impact aid, the communities are probably better off in ability to support schools than they would have been if the federal installation did not exist. Under such circumstances, impact aid serves primarily as frosting on an already quite tasty economic cake.

Case 2: The Federal Government Pays for an Industrial Tax Base That Could Never Exist

The concept underlying the payment rate for federally connected children is that a non-federally connected child is normally associated with tax base through (1) the place of residence and (2) the place of employment. Because these two factors were assumed, when the impact aid legislation was drafted in 1950, to be about equal contributors to school tax base, the legislation provides for 100 percent payment when the child's parents live and work on federal property and 50 percent payments when the parents either live or work on federal property but not both.

In the case of rather large school districts (e.g., in Georgia, Florida, and some other states), it is reasonable to anticipate that if the federal employee has been privately employed, both the place of work and the place of residence would have been in the same school district. In the case of states with smaller school districts, this situation is not as likely to exist. Many states (e.g., Oklahoma, Ohio, Indiana, Massachusetts, New Jersey, Missouri) have relatively small school districts, with a normal pattern including a number of districts that represent residential communities. In some cases, existing land use and zoning patterns are such that an industrial tax base could not develop in the school district even if industry were interested in locating there. Such districts are clearly suburbs — bedroom communities — and do not normally contain the place of employment of the parents whether that employment happens to be government or industrial.

To such districts, the impact aid payments do represent a potential windfall effect. For example, if the parents of students in Oakwood, Ohio (an affluent suburb of Dayton), were suddenly to switch employment from, say National Cash Register to Mead Papers, the district's revenues would be unaffected, as both industries are located outside of the residential suburb of Oakwood. However, if the parents were to switch employment to the Wright-Patterson Air Force Base (also located outside of the school district) the district would begin to receive about $200 annually in impact aid for each pupil whose parent shifted employers to the federal government.*

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*In anticipation of recommendations, it is important to note that the obvious solutions of excluding "3(b)(2) out" students or tying the payment rate to the percentage of tax base that is residential have significant drawbacks.

Case 3: The Federal Government Pays for the Deprivation of a Tax Base That Could Never Exist

One concept of P. L. 874 implies making up for the loss of a tax base of the place of employment on the theory that if the federal government were not involved the place of work would be taxable property. Thus, if an employee works at a base warehouse rather than a private warehouse, the federal government makes an impact aid payment. In practice, however, the federal government pays districts for denying tax base that they never could have had.

All states have maintenance crews to keep their highways in reasonable driving condition. The highways and the adjacent right of way land upon which these employees work are not taxable property in any state of the union – in most states the state government owns the right-of-way. Because the federal government owns much of the land in some states and has chosen to allow them to place highways on its land, rather than making them buy the land from the federal government, some highway mileage is on federal property. Impact aid payments are made to some states on the basis that state highways employees work on federal land, even though there is no tax loss burden when highway employees work on one kind of tax exempt land (federal) rather than another (state).

Case 4: Taxable Activities on Federal Lands

In the Western states, particularly, the federal government owns large quantities of land that is not taxable. Through permits or special rights, some economic activities of considerable value take place on some of these lands. Even though these economic activities can be reached by taxes, the parents who are engaged in them are considered to be working on federal property. Thus, the school district collects taxes on the activity and, because the parent is employed on federal property, also collects federal impact payments.

For example, one New Mexico district received approximately 25 percent of its locally raised school revenues from the taxation of oil drilling and extraction equipment located upon public lands. Nonetheless, the men who man these high-value facilities are considered as working on federal property because the underlying land happens to be federal. In many Western states, when a non-Indian receives permission to locate a business (e.g., a highway store) on Indian land, the school district can tax the value of the store and its contents (but not the value of the underlying real property – which is normally small). Full P.L. 874 payments are made on the basis of the children of the parents who work in such stores and businesses.

Case 5: "GOCO" Facilities

The Defense Department has a number of facilities that are owned by the government but operated by a private contractor (Government-Owned, Contractor-Operated – GOCO) and used in some cases for commercial as well as government work. Such contractors often own large quantities of personal property such as expensive specialized tools and equipment, work in progress, inventory of unshipped goods, automobiles and trucks, etc. States can, and some states do, tax the "possessory interest" involved in the leasing of the government-owned facility. Other states reach the highly valuable personal property with their normal tax laws – though this situation varies from plant to plant depending upon the state's tax laws and the point at which the federal government taxes title to (and thus makes non-taxable) the work in progress and inventories of parts and raw materials.

For example, one school district in a southern state receives about $150 per pupil whose parent works in a GOCO facility, on the basis that the federal government has deprived the schools of the one-half of its tax base assumed to be associated with the place of employment. The district also collects about $70 for each of these pupils in taxes on the property in the plant. Even more striking examples, no doubt, exist in other parts of the country.

Case 6: Double Payments

The federal government has long administered a number of revenue-sharing and in-lieu-of-tax payments for the purpose of compensating local governing bodies for the impact of the federal government on their tax revenues. These payments are normally based upon some feature of the federal property (e.g., RFC in-lieu payments -- P.L. 388) or upon the proceeds from economic activities carried out on the property (e.g., sharing of timber and Taylor Grazing revenues). Because impact aid is based upon the student population rather than property characteristics, the two payments frequently overlap to the benefit of the school district.

Case 7: Pupil Loading Differences

The current program relates its per-pupil payments to a local contribution rate that is constructed by considering either national and state average costs or by examining the per pupil costs of districts generally comparable to the impact aid recipient. These per pupil cost calculations are derived by dividing the total operating costs of a school system by the number of students being educated by it. As a result, the program implicitly assumes that the costs of educating a federally connected pupil are, on the average, comparable to those of educating a non-federally connected pupil.

The most significant difference in pupil costs between military children and the average attendance in school districts derives from the different age profiles of the two groups. Some school districts have good records of enrollment by grade reflecting separately the federally connected and non-federal enrollment. In such districts located near military installations Battelle (and the school officials concerned) have noted a tendency for the military dependents to be concentrated in the primary grades, by comparison with enrollment of non-military children. Because per pupil costs in primary grades tend to be lower than in high school, a local contribution rate based upon average per pupil costs will tend (other things being equal) to overpay a district that experiences its military impact primarily in the lower grades.

Case 8: The Stationary Child

One rationale of P. L. 874 payments is that the federal government causes a child to be in a school district. This rationale fails to cover the circumstance of a father with children in a school system who leaves his children at home while performing military service outside the school district. For example, a father who is drafted and sent to Europe unaccompanied by dependents will create entitlements for the school district in which he left his dependents. An alternative rationale for the P.L. 874 payment is that the federal employment replaces non-federal employment at a place of work on which the school district could levy taxes. In the case of the movement of a single employee, however, the tax liability of the former place of employment does not change, and there is some probability that the earlier place of employment may not have been taxable property in the school district.

Case 9: The Stationary Parent

In many cases, an individual's selection of residence is independent of his selection of employment. In these cases, the child would be in the school system whether or not the parent were federally employed.

For example, some federal installations located in states with a large number of small school districts give rise to impact aid entitlements in as many as one hundred school districts. Tinker Air Force Base outside of Oklahoma City, Oklahoma, provides a good example. It would seem highly likely that many, if not all, of the federally connected students in Midwest City, Oklahoma, are there solely because of the base. It is possible that people drawn to Oklahoma because of the base would live, in some cases, in other nearby school districts. However, it is extremely unlikely that someone moving to Oklahoma to work at Tinker would locate as far as 50 miles away from it.

The explanation for entitlements based on Tinker spreading throughout central Oklahoma is quite simple. Existing Oklahoma residents who otherwise would be farming full-time have, no doubt, found higher pay at the base and thus work there but have not chosen to give up the communities in which they grew up. As a result, the children of these commuting parents are in schools where they would be likely to be even if the Air Base did not exist.

Case 10: The Program Underpays on the Basis of Net-Burden Concepts in Some Special Circumstances

As noted above, impact aid is likely to make overpayments where highly valuable private economic activity takes place on land that is owned by the federal government. Even though the private economic activity is taxable, the property is considered as federal property for the purpose of calculating entitlements. A reverse situation exists where the underlying (low value) land is taxable private property but the major value of the activity on the property is federal and thus not taxable.

A number of examples of this situation no doubt exist. The Battelle team discovered one such example in Alamogordo, New Mexico. As a result of expansion of a neighboring air base, a number of children attending Alamogordo schools were living in government owned house trailers (perhaps worth in the range of $2,000 to $5,000) that happened to be parked on privately owned land (worth perhaps a $100 per parking spot). Effectively, neither the place of residence nor the place of employment was taxable, but the district was paid on the basis of 3(b) pupils (only) because the residence was on private taxable property.

PROBLEMS WITH THE CURRENT PROGRAM IN MISESTIMATING THE PER-PUPIL PAYMENT

Even assuming that the student counts accurately measure the pupil loading on a school system that can legitimately be called a federal responsibility, a number of difficulties arise in using current law to calculate the per pupil payment. Some of these difficulties are discussed in this section.

Local contribution rates calculate payments for a year on the basis of costs two years before. Conceptually, the current P. L. 874 seeks to compensate a district for the costs of educating federally connected pupils on the basis of what such education costs in comparable districts. However, the costs used for these calculations are two years old. With costs per pupil advancing significantly every year, per pupil payments to districts are less than they should be to be consistent with the theory of the program or with a net burden concept.

Many individuals believe that an appropriate measure of the federal obligation to support the education of federal pupils is what districts raise from local taxes to support the non-federal pupils. By this standard none of the current methods of calculating the per pupil payments under P. L. 874 will be accurate in reaching the appropriate per pupil payment, as all of them use some basis other than the district's own financial data to calculate the rate of payment.

Regardless of what one assumes net burden on a school district to be, it is clear that the actions of a state official could not change that burden. Present law permits this through the operation of allowing local contribution rates to be calculated on the basis of groupings of districts selected by state authorities or comparable districts that are selected by the applicant. Further, present law places a great premium upon making manipulations of groupings and in judicious selection of comparable districts in order to maximize entitlements. The inherent flexibility of these methods of determining the per pupil payment rate also gives the Office of Education considerable (but rarely recognized) power to vary the costs of the impact aid program without changes in impact aid legislation having to be made.

The use of one-half state or national average per pupil contributions as a minimum payment rate tends to compensate some districts far in excess of federal burdens under any conceivable theory of burden. The minimum local contribution rate may be calculated by using one half of the national or state average per pupil cost. Currently, this indicates a floor local contribution rate of about $300 per pupil. In theory this would permit a district that raised only one cent per pupil from local sources (the remainder coming from state and federal aid) to claim entitlements of $300 for each federal pupil in attendance. Because of the operation of this national minimum provision, the per-pupil federal payment does not automatically correct for overpayments or double payments. When such excessive payments occur a district may drop its local tax rate, but the method of payment is insensitive to local tax effort and local tax revenues.

The provisions of current law also aggravate the "them that has, gets" problem by tending to make the per pupil payments to richer districts higher than to poorer ones. Particularly in developing "comparable districts, there is a tendency to base the local contribution rate upon other districts that are as affluent as the applicant.

INCOME DISTRIBUTION ASPECTS OF THE PROGRAM

Whether the federal government should be influenced in its educational policies by whether the recipients of assistance under impact aid tend to be relatively affluent districts is obviously a question over which reasonable men can differ. However, it seems reasonable to at least consider the income distribution aspects of the present program.

In general, for the reasons discussed in detail in Chapter 6, there is a tendency for the highest per pupil payments to be made in the richest states (as measured by such indicies as per capita personal income) and the lowest per pupil payments to be made in the poorest states. Within each state, as noted above, there is a tendency for the highest per pupil payments to be made in those districts that have the highest tax base per pupil.

The distribution of impact aid funds among the states is obviously related to the distribution of federal activities among states. Because there is a significant concentration of military installations in Southern states, impact aid payments tend to be higher on a per total pupil basis in these states, most of which have below average per capita personal incomes. Outside the South, a significant percentage of impact aid payments are made to districts in states such as California and Washington that have relatively high per capita personal incomes.

Within states, the situation is more complex, particularly, in those states where the income of federal employees tends to be above state averages, it is not unusual to find that the concentration of impact aid payments occurs in some of the districts with the highest personal income, while the poorest districts have little or no federal impact and thus no P.L. 874 payments. In Virginia, for example, payments are concentrated in the Washington, D. C. suburbs and the areas around Norfolk, while the poorest portions of the state are found in the Western hill country. In Maryland, payments tend to be concentrated in the affluent Southern portion of the state, rather than in the more mountainous poorer areas or on the Eastern Shore. In Colorado, payments are concentrated in the Denver-Colorado Springs area, the most affluent area in the State. There are cases in which somewhat of the reverse effect occurs, primarily in those districts with Indian students (federally connected) whose parents tend to have low incomes.

However, in most states it is incorrect to assume that the heavily impacted districts are either the richest (measured by either assessed value per pupil or personal income per pupil) or the poorest groups in the state. A more normal situation occurs when the heavily impacted districts are not a part of the fastest growing or most affluent metropolitan areas, but are in communities that may have higher incomes and property values than certain other areas of the same state. Because the seat of government is located in Washington, D. C. there is a tendency for many individuals to use Fairfax County, Virginia*, and Montgomery County, Maryland**, as typical examples of impact aid districts. More appropriate examples of federally affected areas are Augusta, Georgia, Rapid City, South Dakota, El Paso and San Antonio, Texas, Alamagordo, New Mexico, and Groton, Connecticut.

OTHER PROBLEMS WITH THE CURRENT PROGRAM

There are a significant number of problems associated with the current provisions of P.L. 815. These problems are discussed in connection with recommendations for changes in payments of capital costs in a later chapter. In passing, it should be noted that most of the P.L. 815 problems result in underpayments rather than overpayments. Other miscellaneous problems with the current legislation are discussed below.

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*Fairfax County was entitled to over $9 million of impact aid funds in 1967-68.

**Montgomery County was entitled to slightly less than $6 million in 1967-68.

Section 2 Payments

Payments for both property and pupils result in double payments to some school districts. When the federal government acquires property in a school district for use as a military installation or for flowage easement for a dam, one of three situations may exist: The assessed value of the property divided by the number of pupils on the property may be higher than, lower than, or equal to, that of the remainder of the district. Assuming that the pupils move out of the district at the same time as the property is acquired*, the school district will be respectively worse off, better off, or as well off as before the federal government acquired the property. Under Section 2 of P.L. 874, the federal government may compensate for situations of federal property acquisition regardless of which of these three situations might exist. More important, if the property is used by the federal government for an activity that generates school children, the district will be paid twice for the property. First, it will be paid because the property was taken off the tax rolls (Section 2 of P.L. 874). Second, it will be paid because the non-taxable property generates students without generating tax revenues (Section 3 of P.L. 874).

Grades 13 and 14

The operation of P.L. 874 is inequitable in its treatment of students in grades 13 and 14. The availability of junior college education and higher educational opportunities has increased rapidly in the United States in the past decade, largely as a result of the financing of such institutions by states (with federal assistance). The financing of this education is diverse throughout the United States. Most states collect some tuition payments for higher education, although the payments do not normally account for anything approaching the full costs of such education. Some states tend to finance grades 13 and 14 primarily through local taxing units (e.g., California), while others have some local taxing units that provide higher educational opportunities while others do not (e.g., Massachusetts has a few districts that provide educational opportunities beyond grade 12 while others do not); still others finance higher education through state sources (most states) rather than local taxing units. The current P.L. 874 formula is not at all neutral among these methods of finance. Currently, California receives reimbursement for its grades 13 and 14 pupils who are federally connected, while other states do not. Battelle has found no economic justification for this difference in treatment.

Public Law 874 Provides an Incentive for States to Refuse to Educate Federal Children

Section 6 of P.L. 874 provides for direct federal funding and provision of education when "no tax revenues of the State or any political subdivision thereof may be expended for the free public education of such children". This provision conditions the federal government's decision to provide for its children directly squarely upon action by the states to refuse to educate such children. Under circumstances of a major burden that is perceived by the state not to be adequately compensated for under the combination of P.L. 874 and P.L. 815, this provision can create an incentive for a state to pass legislation withdrawing a previous right of school districts to provide education for children residing on federal property.

The situation described above has been improved somewhat by the passage of Section 6(f) of P.L. 874 which makes it impossible for a district to count as federal property any property containing students that are denied free public education in the state. Thus, the situation described above will be likely to reoccur only in the cases of those installations that do not have large number of employees living off the geographical boundaries of the installation.

Current funding limitations imposed upon P.L. 815, the prospects for payments of less than full entitlements under P.L. 874 and the uncertainty associated with both programs has caused a significant increase in some areas in interest in turning responsibility for federal pupils back to the federal government.

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*If the pupils stay on the property, they give rise to entitlements as students living on federal property.

The Program Frustrates State Policies to Equalize Education Opportunities

Currently, both the federal impact program and many state school aid programs duplicate each other in reaching at the same educational finance problem. The state programs frequently guarantee a minimum educational program to a district, regardless of its tax base, so long as it levies a stipulated minimum tax rate. The effect of these state aid formulas is to compensate heavily those districts that have very low assessed value per pupil. The federal impact for which P. L. 874 compensates is that of bringing children into a district without bringing corresponding increases in taxable property. The symptom of a heavy federal impact, therefore, should be a low tax base per pupil. In those states with equalizing state aid payments the state aid (paid on the basis of low assessed value per pupil) and the impact aid program (paid on the basis of federal pupils) tend to reach the same districts. Under current federal legislation the states may not take the impact aid program into account in making state payments and the federal government does not take the state programs into account when making federal payments.

Examples of this problem will be found in Chapter 8 dealing with the impact of impact aid on state aid formulas. The problem means that states must use scarce state funds to double pay districts with federal impact, instead of being able to use those funds where the gap between educational needs and financial resources is the greatest.

ANALYSIS OF P. L. 874 AND P. L. 815 IF NOT FULLY FUNDED

The previous discussion has considered the situation assuming that the option of the current program is accepted by the Executive Branch and the Congress resulting in appropriations that are sufficient to pay full entitlements under P. L. 874 and fund all eligible projects under P. L. 815. It is also desirable to consider the option of keeping the present law but not paying full entitlements under that law. Such a situation bears examination for several reasons. First, it could be considered in its own right as an alternative. Second, because the current program has not been fully funded in the last several years, examination of less than full funding is essential to explain some of the difficulties encountered in the current program. Third, although no single interest might adopt less than full funding as an alternative, it is possible that the continued interactions of the Executive Branch, the Congress and the impacted districts will produce less than full funding in the next several years.

Probable Attitude of the Executive Branch Toward Full Funding

For reasons discussed in detail throughout this report, the present program has a number of serious problems of overpayment in relation to the various objectives the program is intended to achieve. Many of these problems have been understood for a long time, others will have first come to light with the publication of this report.

The question facing any Administration will be whether to include full funding for P. L. 874 in its current budgets, assuming that recommendations for change in the P. L. 874 legislation are not recommended or, if recommended, are not enacted. In making this decision, the Administration (both the current Administration and any subsequent ones) will consider the value of the current program in relation to (1) other education programs – both those already in existence and those that could be inaugurated, (2) other federal expenditure demands ranging from defense to housing, and (3) the possibility of lower federal taxes. In such a context, an Administration will not adopt full funding of P. L. 874 merely on the basis that full funding would do more good than harm; it must decide whether using the funds for full funding of P. L. 874 is superior to all the other options for the use of the amounts involved.

School districts would like to see P. L. 874 entitlements considered as a commitment of the federal government which, like interest on the national debt, would largely be paid automatically. However, unless the present P. L. 874 program is changed substantially, the program goes well beyond what might reasonably be considered the obligations of the federal government. Thus a continuation of the present P. L. 874 legislative framework is likely to cause any Administration to consider P. L. 874 as it would any other education program and to alter funds requested from the Congress in response to various factors including demands for expenditures for educational and non-educational programs. The result is likely to be in the future what it has been in the past. Confronted with circumstances where the P. L. 874 authorizing legislation remains essentially unchanged or is broadened, the past three administrations have consistently requested funds well below those necessary to pay full entitlements. It seems reasonable to predict that future administrations are unlikely to accord a high priority to full funding for the present impact aid program.

Consequences of Recommending Budgets to Pay Less-Than-Full Entitlements

Recommendations for paying less than full entitlements under P. L. 874 and P. L. 815 may have significant consequences in causing the Congress to provide less for the programs than it otherwise might. However, even if Congress provides full funding for impact aid despite Administration recommendations (and assuming that the Administration spends those appropriations), there are consequences stemming from the situation that are independent of the size of the final impact aid appropriations.

First, when an Administration recommends less-than-full funding, many school administrators decide to carry the fight for full entitlements to the Congress. Many of these administrators would prefer to use their time in improving the education offerings of a school system by other methods than through continuous involvement in national politics.

Second, the Administration recommendations of less-than-full funding automatically trigger a problem under standard practice in continuing resolution authority. In recent years, educational appropriations (in common with other appropriations) have tended not to be made until some three or four months (or more) into the fiscal year for which they are made. To operate federal programs in the interim between the end of one fiscal year and the appropriation for another, Congress adopts a continuing resolution, the usual effect of which is to allow the federal agencies to operate at the lesser of the expenditure rate of the preceding year or the expenditure rate of the President's budget recommendations. This phenomenon has a tendency directly and indirectly to slow the rate of payments under P. L. 874, thus contributing to the problem of late payments that are bemoaned by many school districts receiving P. L. 874 funds.

Third, when the Administration recommends a low budget for P.L. 874, school budgeting becomes a near impossible mess in the heavily dependent districts. Although school finance timing varies throughout the United States, the example below indicates the nature of the problem in most jurisdictions in the United States. The example represents a composite district that is similar to, but not identical to, any P. L. 874 recipient.

The district began budget planning for its 1969-70 school year in the fall of 1968. In many states, the property tax rates for the following year (including part of the 1969-1970 school year) had to be set even before calendar 1969 began. In its budget planning a school district will normally estimate the costs of continuing present programs, consider the costs of potential new programs and salary increases and estimate the revenues expected to be available. Then, it can consider whether to change tax rates and whether to adopt new programs or salary increases.

This process is frustrated in districts that receive a large percentage of revenue from P. L. 874, because it requires in the Fall of 1968 (or whatever year is chosen for the example) that the district be able to make a reasonable guess about its entitlement for the following fiscal year. Such a guess is nearly impossible to make before the President's budget is released (January, 1969) and difficult to make thereafter. For example, in December of 1969, nearly halfway into the school year, school districts had no reasonable basis for estimating what payments they would receive under the P. L. 874 program because Congress was still considering what the appropriation should be and the Executive Branch still considering its authority to refuse to spend what Congress might appropriate.

This uncertainty confronts a heavily impacted district with a nearly impossible situation as is indicated by the following listing which shows the sensitivity of tax rate decisions to P. L. 874 funding assumptions for a typical (but hypothetical) heavily impacted district.

Program Decision	Assumption About P. L. 874	Local Tax Rate Required, %
(1) Continue current program	(A) Full entitlement	No change
	(B) Prorated at 80 percent	up 7
	(C) Eliminate 3(b) pupils	up 33
(2) Give teachers 5 percent rather than 3 percent salary increase	(A) Full entitlement	up 2.7
	(B) Prorated at 80 percent	up 9.7
	(C) Eliminate 3(b) pupils	up 35.7
(3) Reduce pupil teacher ratio from 25:1 to 23:1 and increase instructional materials by $5.00 per pupil	(A) Full entitlement	up 7
	(B) Prorated at 80 percent	up 14
	(C) Eliminate 3(b) pupils	up 40

Source: Developed by Battelle to indicate situations in heavily impacted districts.

The dilemmas of the heavily impacted school district can be demonstrated by assuming that the superintendent, the teachers, the board of education, and the voters all preferred to increase taxes 10 percent to finance a 5 percent increase in teacher compensation and a slightly reduced pupil teacher ratio and somewhat more instructional material per pupil. In a non-P. L. 874 district, accomplishing this would be simple (given our assumption that everyone wants the change and is willing to pay for it). Depending upon the state, the board of education would enact the tax increase, put it in its budget to be approved by a municipality or county, or would submit the proposed increase to the voters. There is no way that the district relying heavily upon P. L. 874 can arrive at the educational result it desires except through blind luck.

If the district assumes that full entitlements will be paid and finds out halfway through its school year that they will not be, it must curtail its expenditures sharply in the second half of the school year. Because most of the costs elements of elementary and secondary education (e.g., teacher salaries and number of teachers on contract) are fixed at the beginning of the year, mid-year adjustments are extremely difficult to make. If, on the other hand, the district assumes that less than full entitlements will be paid, an unbudgeted windfall will occur if such entitlements are paid in full.

Many P. L. 874 recipients have been able to develop ways to mitigate the uncertainty of P. L. 874 payments. These methods include (1) consideration of such receipts in the budget for the year following the year in which they are supposed to be paid, (2) trying to accumulate cash balances, (3) deferring certain discretionary purchases of equipment until near the end of the school year so that, if entitlements are not paid in full, these purchases may be omitted, and (4) making salary committments contingent upon P. L. 874 funding levels. More lightly impacted districts can avoid the impact of the uncertainties of P. L. 874 by treating impact aid receipts as one of a number of relatively small and uncertain categories of miscellaneous receipts. The districts that are least able to hedge against the uncertainty of P. L. 874 payments tend to be those that need these payments the most – namely the heavily impacted districts.

The comments of school district officials on P. L. 874 (see Appendix A) indicated that by far the two most serious problems perceived were the uncertainty of payments and the timing of payments. The above analysis indicates that these problems are real, but that they cannot be resolved so long as the Administration recommendations for P. L. 874 and the Congressional actions on these recommendations differ substantially.

Consequences of Paying Less-Than-Full Entitlements

The preceding discussion has examined the consequences of Administration recommendations of less-than-full funding or of program recommendations that would tend to cut entitlements in the assumption that the Congress ultimately enacts appropriations sufficient to pay full entitlements and the Executive Branch ultimately spends such entitlements. In the past several years, it has become increasingly apparent that a situation is developing in impact aid where the payment of less-than-full entitlements could become standard practice.

The conclusions of this report indicate that the present impact aid program seriously overstates the net burden of federal installations and contains a number of other significant and inherent problems. Those conclusions also suggest that a new approach to impact aid could be developed that would solve (or at least mitigate) a number of those problems. Given its conclusions that a program substantially better than the present one should be adopted, Battelle is not in a position to recommend whether payment of 80 percent, or 90 percent (or any other percentage) of current entitlement would be better or worse than paying full entitlements, assuming that impact aid remains essentially unchanged. However, Battelle is in a position to point out the consequences of payment of less-than-full entitlements under current law.

Under current law, when appropriations are lower than full entitlements, the federal government first pays full entitlements under certain specialized sections of the legislation (e.g., to maintain base schools managed by the military departments) and prorates the remaining funds over all eligible districts as a uniform percentage reduction. This proration method of Section 5(c) appears to have considerable support from P.L. 874 recipients as indicated by the fact that almost 60 percent of the nearly 3000 recipient districts responding to Battelle's questionnaire recommended that, if less than full entitlements were paid, the reductions should be prorated in proportion to entitlements. Priorities for the districts with the lowest tax base per pupil drew 15 percent support; payments based upon 3(a) students drew 10 percent support; and only about 9 percent suggested that priority should be given to districts that get a high percentage of their total budgets from impact aid.*

For a typical district with a 5 percent relative federal impact or less the consequences of paying, say, 85 percent of full entitlements are not severe if sufficient notice is available so that other school budget adjustments can be made. Typically, such a district would be financing about 50 percent of its expenditures from state aid and the other half from the combination of local taxes and P.L. 874 payments. If the payment per equivalent federal pupil approximated the local revenues raised for each non-federal pupil, the P.L. 874 entitlement would represent the same percentage of the non-state aid portions of the budget as the equivalent federal pupils do of the total pupils, in our example, 5 percent. A 15 percent reduction in 5 percent of the non-state portion of a district's budget would indicate a reduction of less than 1 percent in that portion of the district's budget (0.05 times 0.15). Thus such a district could adjust to payment of 85 percent of full entitlement by an increase in local taxes of less than 1 percent. Alternatively it could reduce expenditures to absorb the P.L. 874 reduction by a decrease in per pupil expenditures of less than one-half of 1 percent. Thus, the payment of less than full entitlements has relatively minor effects on those districts that receive only a smaller percentage of their budgets from P.L. 874 funds. It will be recalled that Table 4.1 indicated that well over half of P.L. 874 recipient districts have less than 6 percent relative federal impact.

By contrast, in a heavily impacted district, P.L. 874 may represent the single largest available source of funds. In the extreme case where P.L. 874 represents 70 percent of the district's budget and the relative federal impact is 80 percent of total students, payment of 85 percent of full entitlements is equivalent to requiring a district to raise its local taxes by about 50 percent or to reduce its total expenditures by over 8 percent. This magnitude of reduction may, if the district has not had the opportunity to have advance warning of its coming, cause severe adjustments in the educational program of the district.

The consequences of less-than-full funding in P.L. 815 are somewhat more severe in certain districts that rely heavily upon federal funds and have little access to local or state construction funds. Those consequences are less severe in the case of the Washington, D. C., suburban districts that constitute major P.L. 874 claimants because much of the growth of federal employment in recent years has been concentrated in the Washington, D. C., area.

Because of the major consequences of less-than-full funding for the heavily impacted districts, if the present legislation is to be kept, it would seem desirable to amend it to change the priorities system now in effect in less-than-full-funding situations.

The ultimate solution to the problem of appropriation and expenditure of less-than-full entitlements under the current legislation is to adopt legislation that can command the support of all concerned as being necessary to compensate districts for the impact of federal activities. Much of the objection to full funding of P.L. 874 stems from the widespread belief that current law overcompensates many districts and thus that less than full funding would simply overcompensate them less than they would prefer. If an impact aid program could be developed that could avoid major overcompensation of certain districts, full funding of that legislation would be more readily obtained.

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*Because there was some tendency for districts to prefer systems that best fit their situations, these percentages would be likely to differ if they were weighted by the P.L. 874 entitlements of each respondent.

(63)

CHAPTER SUMMARY

This chapter has dealt with the current impact aid program as one of the options available for dealing with the federal impacts on local school systems. The large number of problems with the current program (both overpayments and underpayments) indicate that the current program does not conform to one that would be designed today as an appropriate vehicle for aiding school systems adversely affected by federal activities. If the current P. L. 874 and P. L. 815 provisions remain unchanged, it is reasonable to predict that no Administration is likely to recommend full funding for them. As a result, without major changes in these laws, all interested parties (the Executive Branch, the Congress, and the school districts) can look forward to a continuing period of uncertainty, legislative struggle, late payments, and general controversy surrounding impact aid.

Whether this highly unsatisfactory situation can be improved depends upon two factors: (1) whether a satisfactory program can be designed and (2) if such a program is designed, whether it can be successful of enactment by the Congress. The question of designing a satisfactory program is dealt with in the following chapters of this report. The political questions entering into a decision to enact such a program are beyond the scope of the present research.

CHAPTER 5: DEFINING THE FEDERALLY CONNECTED CHILD

INTRODUCTION

This chapter begins consideration of the major issues in the design of a new impact aid program. One key program design element is the calculation of the loading of pupils on a school system, or, in simpler terms, what students are to be counted by what method? The approach of the chapter is to consider students in various categories on a conceptual basis and then to shift to the important practical questions of how student counts can be administered.

STUDENTS LIVING ON FEDERAL PROPERTY WITH A PARENT WORKING ON FEDERAL PROPERTY

A large percentage of 3(a) students under current law (who live and whose parents work on federal property) stem from military on-base housing for dependents of uniformed military personnel. Ignoring the potential favorable economic impacts of the base upon the local community, the case for inclusion of these students is the strongest for any student category. It can clearly be demonstrated that these personnel are on-base because of a decision of the federal government; the base is not taxable; the family housing on the base is not taxable; the impact of the Soldiers and Sailors Relief Act* is to deprive the local government of income tax revenues, and the bulk of sales-taxable transactions occur through the commissary and Post Exchange system. The students involved are easily identified and counted.

A number of federal civilian agencies manage programs that are comparable to the maintenance of on-base housing by defense agencies. Significant numbers of students reside with their parents on federal property at such installations as national parks, national forests, hospitals, and Coast Guard stations. The economic impact of the presence of these students is comparable to military dependents, with the exception that the parents do not benefit from a PX and commissary system and are not covered by the Soldiers and Sailors Civil Relief Act.

Indians living on reservations present a situation considerably different from the economic impact of a military base or Coast Guard installation on a local community. The legal responsibilities and rights of the state government and its instrumentalities (such as school districts) vary among reservations and on the basis of the type of title encumbrances on land held by individual Indians.** The educational problems of Indian students differ substantially from those of military and civilian employee dependents. The original P. L. 874 program did not encompass the American Indian population, but provision for Indian children was subsequently added.

The economic impact of the federal government on school districts that educate Indian children is comparable to the impact of the federal government on school districts that educate children from military on-base housing. In both cases, the federal government has caused the students to be located where they are. In both cases, through federal action, the property upon which the students reside cannot be reached by local property taxes. Thus, in terms of economic impact, the inclusion of Indian students in impact aid appears reasonable. Whether impact aid is the best method for the federal government to discharge its responsibilities for Indian education is another question – a question addressed at length in a subsequent chapter of this report.

The categories of students described above account for virtually all of the students considered as a basis for impact aid payments under Section 3(a) of the current legislation. It would seem appropriate to continue to consider all of these pupils in any new formula for impact aid payments. Table 5. 1 indicates the categories of students involved.

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*This legislation defines the status of military personnel vis-a-vis local taxes, license laws, etc.

**These rights and responsibilities cover such matters as the power to tax, to make arrests, and to apply other laws.

TABLE 5.1. SOURCE OF STUDENTS WHO LIVE AND WHOSE PARENTS WORK ON FEDERAL PROPERTY

Department or Activity	Students
Navy	68,350
Army	70,796
Air Force	149,071
Indian reservations	38,216
Indian-owned, tax-exempt land	6,399
Public domain lands	2,574
National parks	1,356
National forests	1,129
Veterans Administration (primarily hospitals)	981
Other	9,021
TOTAL	347,893

Source: Derived by Battelle from data provided from the Office of Education's analysis of 1968 RSF-1 (application) files.

STUDENTS WHO LIVE ON FEDERAL PROPERTY WITHOUT A PARENT WHO WORKS ON FEDERAL PROPERTY

About 9,000 students are claimed every year under P.L. 874 under circumstances where the place of residence is federal property but the place of work is not. Entitlements based upon such pupils approximate 3 million dollars annually. Well over half of this group is accounted for by Indians working off the reservation but continuing to live on it. The remainder derive from a series of miscellaneous situations. For example, a government agency buys land for future use and may allow the former owner to continue to live on it for a year or two, or if a military officer is killed, his dependents may continue to live in base housing for a period and, during that period, the widow may find civilian employment. The economic case for counting these students in an impact aid formula appears to be sound under a tax loss concept, as the school district does not have access to the place of residence as a source of school revenues, and under a service burden concept.

An anomaly does exist in the counting of Indian students and their classification under certain minor circumstances. As Battelle understands the student-count procedures involving students living on reservations and other federal land, that practice does not require that the student's parent actually be employed on federal property. If he is not employed off federal property, he is assumed to be employed on federal property, when, in fact, he frequently is not employed at all. Some school districts have complained that when an unemployed Indian parent takes a low-wage job in town, their entitlements are thereby reduced, despite the fact that their educational costs have not changed. Because the economic impact of an Indian child whose parent has no place of work at all is similar to the impact of a child whose parent has a non-taxable place of work (a federal installation) it can be argued that counting children of unemployed reservation Indians as 3(a) students is reasonable under a service burden – but not a tax loss concept.

PARENTS WHO LIVE ON PRIVATE PROPERTY BUT WORK ON FEDERAL PROPERTY

The bulk of payments under the current impact aid program are made on behalf of students whose parents live in taxable residences but who work on federal property. These parents may work on federal property located within the same school district as their residence or in another school district. The distribution of claimed children whose parents work on federal property, but who live on private property (Section 3(b) (2) students), is shown on Table 5.2. Current procedures allow payments for students when the parent is a member of a uniformed service (e.g., Naval officer) without requiring that the parents' place of work be specified (Section 3(b) (3) students). As a result these children cannot be classified in Table 5.2 in terms of whether the property on which the parent works is located within the district providing schooling to the children.

TABLE 5.2. SOURCES OF 3(b) STUDENTS

Agency or Activity	Students With Parents Working on Federal Property In the District		Students With Parents Working on Federal Property Outside the District
Uniformed service (branch unknown)		(566, 969)	
Navy*	140, 974		183, 550
Army*	160, 050		210, 381
Air Force*	190, 625		209, 082
Agriculture (incl. National Forests)	14, 710		9, 015
Interior Department	22, 426		10, 263
Justice Department	2, 348		2, 369
Treasury Department	2, 321		1, 576
Veterans Administration	36, 440		29, 591
General Services Administration**	91, 956		101, 211
TVA	3, 364		6, 341
HEW	12, 229		26, 253
AEC	29, 549		50, 209
Corps of Engineers	5, 597		10, 129
Other	40, 094		45, 667
Total	752, 683	(566, 969)	895, 637
Grand total = 2, 215, 289 students			

*Includes civilian employees and some uniformed personnel.
**Includes other agency employees in GSA buildings.
Source: See Table 5.1.

Consideration of Table 5.2 clearly indicates that the current impact aid program is basically a program for dealing with the educational problems of Defense Department employees. Some 75 percent of all of the 3(b) children are directly related to defense activities.

Should The Students Be Counted At All?

Considerable controversy exists over whether the children who live in privately owned dwellings should ever give rise to P. L. 874 payments. Although the proposal was rejected by the Congress, the Administration did recommend confining impact aid to 3(a) students in its fiscal 1970 budget proposals.

While having considerable reservation over payments under certain circumstances to be described in later chapters, Battelle can find no logic to exclude payments for all of the (b) pupils. The analysis of economic burden developed in Chapter 2 would indicate that circumstances do exist where 3(b) pupils alone do place a burden upon a school system.

In the extreme case, the 3(b) child represents the following situation: A military base expands its manning levels and in the process brings a number of new military and civilian employees to the area around the base. Limited base housing is not sufficient to house all of these individuals, and they and their families find housing in the local market. These employees bring their children, who become students in the local school system. These employees frequently will live in housing (e.g., trailers) with extremely low assessed value (or none in some states). Even when they live in more normal housing, the taxes on the place of residence do not necessarily defray the costs of educating their children. For example, a family with two school age children that lives in a $25,000 home will, assuming a national average tax rate, contribute about $375 annually to local school revenues, while causing about $1,200 in additional school costs. Some of these additional school costs will be covered by state aid, but even if state aid covered half of the costs, the local school system would find its revenues increased by $375 and its costs by $600 from such a family.

In the extreme case, the new residents of the area will not bring substantial additional tax base in the form of service industries because basic services (e.g., medicine and dentistry) and sales (e.g., food and clothing) may well be provided through the base. Also, in the extreme case, these migrants do not bring the residential property values that could carry equivalent student loads. A school district obviously makes a profit on a 55-year-old couple whose children have passed the twelfth grade, but both military and civilian personnel migrating to a new base are not likely to be in the 55+ age bracket and military personnel without dependents will normally be housed on the base.

The above example, if true in a single case anywhere in the United States, would indicate that at least some 3(b) students should give rise to entitlements under an impact aid program. Available evidence indicates that such situations do exist in the United States. In its visits to school districts, Battelle has received anecdotal evidence from a variety of sources that the example above has real world counterparts. Further, some school districts can demonstrate that their assessed value per pupil (excluding 3(a) pupils whose inclusion would make the situation even more striking) dropped significantly coincident with a major opening or expansion of a base.

The question of the rate of payment for a (b) pupil, however, is a different matter. The current program pays half as much for a (b) pupil as for an (a) pupil on the theory that the school district is entitled to a complete tax base behind each child. This complete tax base is presumed to be made up of industrial and commercial property (50 percent) and residential property (50 percent). When a child's parents neither live nor work on taxable property the payment rate is 100 percent of the local contribution rate (LCR), but when either, but not both of these situations prevail, the payment is 50 percent of the LCR. Battelle's conclusions that some 3(b) students should be counted does not imply that the existing method for calculating local contribution rates for such students is correct.

Problems Relating to the District of Residence

One of the most controversial questions about P. L. 874 has developed around the distinction between the 3(b) "ins" and the 3(b) "outs". The current program does not distinguish between children living in the same school district in which the parents work and those students who live in a different school district. In the current concepts of burden, this distinction is important. If the federal property were taxable, it is clear that the position of a district educating 3(b) "out" students would not be improved, because that district could not tax the property not in its jurisdictional boundaries. Further, it is clear that the notion that a school district is entitled to 50 percent of LCR based upon the non-taxability of the parents' place of work has no application to a school district that is located in a bedroom community.

This type of logic has led various observers quite quickly to one of two approaches to P. L. 874. The first approach is simply to deny payments (or reduce payments) to districts that claim upon the basis of the 3(b) "out" students. Another approach – adopted by the Stanford Research Institute in its 1965 report – was to base entitlements upon the percentage of property in a district that was residential.

Stanford's concept would measure the percentage of property that was residential in each school district and base the payment for (b) children upon the reciprocal of that proportion. Thus a school district that was reliant upon residential property for 75 percent of its revenues from local sources would be entitled to a 25 percent contribution on the basis of a 3(b) student whose residence was taxable but whose place of employment was not. This type of approach has two major problems. First, it is not practicable to measure the percentage of property that is residential in each school district within reasonable administrative costs. Second, if it were possible, the results would be highly misleading. The Stanford approach would work well for a district that clearly would be a bedroom community whether the parents' place of employment were federal or non-federal. The difficulty comes when the residential character of the tax base of a community is itself caused by the federal government. For example, Community A has a single large industry whose workers live in the town; Community B has the same situation only the industry happens to be a government-owned arsenal. Figures on the assessed value of property will show that Community B is a residential community and base entitlements accordingly, a misleading result.

The concept of not paying any of the expenses of the 3(b) "out" student appears reasonable in the context of a P. L. 874 payment that attempts to compensate a school district for the non-taxability of the place of employment. However, from the standpoint of a program that seeks to compensate for the net burden of federal installations, excluding 3(b) "out" students from the program is not consistent with net burden concepts. Conceptually, we have indicated that the key question is what the school district can raise from its tax sources, given its federal impact, versus what it would have been able to raise without the federal impact. Where the induced effects of federal installations leave the district better off than it would have been, this effect may cover both 3(b) "ins" and "outs". On the other hand, there is no reason to assume that positive economic impacts of federal installations exceed the costs of educating 3(b) "outs" in every school district.

Under this burden concept, a distinction between 3(b) "ins" and "outs" is hard to justify, although a distinction between districts with and without burdens makes sense. It may be that districts without federal property in their boundaries are more likely to have positive rather than negative impacts from federal activity, but 3(b) "outs" cannot logically be ruled out of the impact aid program in their entirety.

This can best be seen by example. Fort Bliss is a major army installation that accounts for a large percentage of the land area in a county in Texas. That county has two school districts, Ysletta and and El Paso. The Fort is a separate land area, entirely owned by the federal government, that adjoins the privately owned land in both districts at certain points. The Fort could be included in either district without creating geographic boundaries that would appear unusual. Both districts educate a number of children from the base who live in private housing near the base. In addition, one of the districts educates the children living on the base. By reason of a provision in Texas law that has nothing to do with the impact aid program, the location of the Fort within one or the other of the school districts has been litigated in Texas.* By virtue of that litigation the base was at one time considered as being part of one district, but is now considered to be part of the other.

Battelle has visited these school districts and discovered that both of them educate a substantial number of 3(b) pupils, whose parents work on Fort Bliss but who live in homes in the respective districts. Both districts feel that they are significantly burdened by the presence of the federal installations.

If 3(b) "outs" are to be excluded one of these districts would receive no payments for its 3(b) children, while the other would be paid for all its 3(b) children. Obviously which district is paid will depend upon the old Texas court decision. Further, should the court ever change its mind, impact aid confined to 3(b) "ins" would have to follow that change. Clearly a program that calculates net burden on the basis of court decisions about boundaries has some rather major elements that are not economically or educationally based. In other words, because school district boundaries in the United States are arbitrary, to introduce them into an impact aid formula to exclude 3(b) "outs" makes neither economic nor educational sense.**

One of the major advantages claimed for eliminating 3(b) "outs" from the program is to reduce its cost. Yet, it is doubtful if the cost savings from this approach could be realized in the long run. While the first impact of eliminating 3(b) "outs" would be to reduce entitlements by about $200 million, states would quickly find ways to increase those entitlements again by merging the federally affected districts. All of the savings from excluding 3(b) "outs" in the case above could be wiped out by a simple consolidation of the El Paso and Ysletta districts – that consolidation would alone cost the federal government the total of Ysletta (the out district) entitlements. Similar consolidations of federally affected districts could be expected elsewhere.***

The attractiveness of the exclusion of 3(b) "outs" is also traceable to the concept that some districts are really not losing tax revenues because they couldn't tax the federal place of employment even if it were privately owned because it would lie outside the school district. However, the impact aid concept of paying on the basis of students rather than property also violates this tax loss concept because the payments with respect to federal pupils who live in the same district as the installation will frequently exceed the payments that would be made if the installation were taxable. For example, the taxes levied on Indian lands might well be considerably less for certain school districts than the P. L 874 payments. If a concept that impact aid should not exceed potential tax loss were adopted to eliminate 3(b) students who live outside the district with the installation, such a concept should also be applied within the district having the federal installation. Thus, we believe that the 3(b) "out" students should continue to be counted for impact aid. To the extent that a large number of 3(b) "out" students coincides with other problems (such as large payments to affluent districts), the problems can best be attacked directly, rather than by excluding payments for 3(b) "out" students.

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* The local contribution requirement under the Texas state aid formula is reduced by a factor representing the proportion of federally owned property in the school district. Thus, each district gains an advantage if it can claim the acreage of the base.

** If there are overpayments on the basis of (b) students inherent in the present law, these overpayments are as likely to be made on 3(b) "ins" as 3(b) "outs".

*** This example demonstrates that a formula that excluded 3(b) "outs" would not conform to net burden concepts. Obviously the merger of two districts does not increase net burden.

The "Working On" Definition

Students give rise to entitlements when they have a parent working on federal property. As noted in Chapter Two the basic logic of the P. L. 874 payments are that the student would, but for the federal impact, not be in the district causing educational costs. An alternative logic is that the school district would be collecting taxes on the parent's place of work, but for the fact that that place of work is nontaxable federal property. Neither one of these justifications make any sense in those cases where the primary wage earner in a family works on private property, but a secondary wage earner such as a working wife, works on federal property. The economic logic of the program would thus call for the student count procedures to distinguish between primary and other wage earners for the purposes of determining entitlements. Failure to do this means that the student counts tend somewhat to overcount the burden of federal installations.

Despite the overcounting inherent in failing to distinguish between primary and other wage earners, Battelle does not recommend that the student count procedures be made any more complex in an attempt to correct this problem. Administrative costs of including this distinction would be high,* definitional problems would be serious, and the resulting improved accuracy would still leave many more serious conceptual problems of the type described in Chapter 2. Like the problem of the 3(b) (2) "out" students, this counting problem is best handled through the workings of a general burden formula rather than through elaborate refinements in student counting techniques.

A similar series of problems arises in connection with temporary or seasonal workers on federal property. Under current procedures, the federal connection of the parent is based upon whether he was employed on federal property on the student count date. Such a procedure, administered in a way to include persons employed on federal property but not physically present on the property on the count data, makes the student counts sensitive to the choice of the count date in the case of temporary or seasonal workers. Conceptually, the economic impact of such workers - like the impact of full time workers - depends upon such questions as whether they would be living in the school district even without the federally connected employment and whether they would cause an increased local tax base by working on non-federal property if they were not employed on federal property. Administratively, applicant school districts can be expected to select a date for counting students that tends to maximize the number of federally connected students. For example, Battelle found from the files of one applicant district that the district corresponded with the local large defense contractor to determine a count date that would correspond to the employment peak at the contractor's facility.

The problem of seasonal and temporary workers is simply another aspect of the way in which the current P. L. 874 program tends to overestimate the economic burden of federal installations. The administratively most practicable method for correcting such a problem is in the context of a general burden formula.

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*The obvious definition of primary wage earner would be to consider as primary the wage earner receiving the most income, or to allocate the federal responsibility in the proportion that the spouse working on federal property represented of the total income of all wage earners in the household. Seeking to obtain income data through questionaires is always difficult and would be even more difficult through impact aid procedures where the forms are carried to school by students.

Definition of Federal Property

Chapter 3 described in some detail the problem of double payments of federal obligations that arise when a school district receives impact aid payments based upon parents working on a particular property and receives tax payments (as in the case of a government-owned, contractor-operated facility), shared revenues, in-lieu-of-tax payments or similar revenues generated by that same property. In these cases Battelle has considered recommending that the definition of federal property be changed to exclude such properties, thereby making it impossible to count as federally connected the students whose parents work on such properties. However, such a recommendation would be inequitable in those cases where the special payments are clearly less than either the payments that would be made if P. L. 874 were allowed to operate or the payment that would be made if the full facilities were taxable. Furthermore, the districts that housed many of the workers from such a plant would receive neither P. L. 874 nor the shared revenues and payments in lieu of taxes if such a step were taken.

Rather than excluding such facilities from the definition of federal property, the school districts should be permitted to count such facilities as federal property under the same ground rules currently in effect under P. L. 874. However, such districts should have to deduct from the amounts due under impact aid, the amounts already received from such devices as shared revenues from forest lands, in-lieu payments on certain properties and the revenues received from government-owned, contractor-operated facilities. As a practical matter this recommendation would mean that such facilities would be claimed by school districts only if such revenues from the property were less than the entitlements generated by that property.

The definition of federal property under P. L. 874 has experienced considerable gyration in the area of facilities providing a local benefit or service, and particularly in the case of Post Office facilities which are not, at the moment, counted as federal property when used primarily for postal purposes. This exclusion has a kind of dual rationale: first, that inclusion of postal employees would be expensive and second, that the Post Office exists to provide a local benefit and thus should not really be considered as producing a burden on the local school districts.

Because the Post Office has over 700,000 employees, the costs of adding postal activities to the current P. L. 874 program would be substantial. Assuming that the ratio of postal employees to school age children of postal employees is the same as the ratio of the total labor force to total school age children, inclusion of postal employees in P. L. 874 would tend to cost in excess of $100 million annually.

The argument for excluding postal employees on the basis that they exist to provide a local benefit is not strong. First, in fact, many postal employees work at processing facilities that are intended to service entire postal regions, not merely the communities in which they may happen to work. Second, many other government programs are intended to provide local benefits and none of those programs are excluded from P. L. 874 entitlements.

The major argument (outside of cost) that is significant in the case of postal employees is basically an absorption concept. That concept suggests that there is some cost of educating federally connected children that can (and should) be borne by the local community. This concept would argue that so long as postal workers are relatively evenly distributed throughout the country, no special major burden is being placed upon any one community. Further, given relatively uniform distribution, the taxation of everyone simply to return the money to Washington and through Washington to about the same places the money was raised may appear an unnecessary series of transactions.

There is, however, good reason to believe that the distribution of impact aid funds on the basis of postal employees would tend to benefit the large cities substantially in relation to other types of school systems. First, the average postal worker in metropolitan areas is relatively low paid in relation to many occupations available in the community. We suspect (without hard evidence on the point) that he is more likely to be found living in the central city than are many of the other federal workers. Second, the regional mail processing centers are more likely to be found in the large cities. Thus, we believe that if Congress or the Administration were seeking a readily available method to increase federal support of large city schools, inclusion of postal workers in P. L. 874 might provide a very useful tool. We cannot, however, conclude that the postal workers present the same case of net burden that may be associated, for example, with Defense Department dependents near a military base. There is small likelihood that the postal employees move into a community with their children specifically because of the postal employment.

Inclusion of postal workers is left unresolved in this section of our report because, as will be indicated later, the problem in effect solves itself in the context of the net burden formula developed by Battelle in a later chapter of this report.

THE STUDENT COUNT AND ITS ALTERNATIVES

Since their inception, P. L. 874 and P. L. 815 have relied upon a survey of students to determine the basis for entitlements. The essence of the student survey is to have each parent of a federally connected child execute a form indicating the name of the child, the name of the parent and some evidence of the fact that the parent lives or works on federal property or both. The completed student surveys indicate, or are supposed to indicate, the number of federally connected students in membership in the school system on the day of the count. This count is converted from an average daily membership basis to an average daily attendance basis by multiplying the total by the fraction that average daily attendance is of average daily membership for that district.

Battelle has considered a number of alternatives to the student surveys, including using existing data sources (e.g., Armed Forces personnel data, distribution of federal land, federal employment, and federal contract expenditures) to estimate federally connected students. However, there are problems with each of these sets of data which – together with Battelle's finding in its field work that P. L. 874 applicants generally do not find the surveys burdensome – suggest that the pupil survey probably is the best source of data for entitlements calculation. A quote from the Texas "Field Study Report"* filed by Battelle staff members summarizes the typical feelings of the districts surveyed by Battelle:

> The school districts are not bothered by the survey procedure because (1) they see the logic of the surveys, (2) they get a sizable return on the money they spend making the surveys and (3) the surveys do not seem to consume much administrative time or effort.

A very serious defect shared by all of the alternative data sources considered is that they provide no information on individual school systems. Many of the data series are available for no areas smaller than states, and most of the others do not go below the county level; and in all but a very few states – such as Virginia and Hawaii – there are usually several school systems per county. There is virtually no data series with detail at the school district level. Further, there is no obvious way by which the countywide or statewide data could be allocated among school districts so that the estimates so obtained could be used with confidence in determining impact aid entitlements.

PROBLEMS WITH THE STUDENT SURVEYS

Undercounting

Because a school system receives, on a national average basis, some $350.00 for each 3(a) student it can count and about $175.00 for each 3(b) student, school officials have a substantial incentive to make sure that the student counts do not miss any federally connected children. As might be expected, most school systems have adopted procedures that do ensure that no such students are omitted from the counts. These procedures include surveying all students, rather than just trying to single out federally connected students, to make sure that every parent executes a form on the chance that his children might be federally connected without the parent realizing it. Also, some systems check with major federal employers or government contractors to obtain names of parents working for that employer. Because student counts have been taking place in many heavily impacted recipient districts for two decades, these methods have been perfected and parent acceptance of the student counts is high.

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*In addition to this report, Battelle has filed with the Office of Education a number of preliminary progress reports, trip reports and working papers.

Occasional problems have been encountered in some districts with parents who seek to use the occasion of the student count to complain about some aspect of school administration. For example, some districts which do not provide free bus transportation or textbooks reported that some military parents accustomed to such services have used the forms as a basis for complaints at the existence of P. L. 874 program on the ground that the school districts shouldn't be receiving federal aid besides getting the parents' own taxes. However, these types of problems are rare and, because of follow-up by school officials, do not seem to cause any problem of undercounting of students.

A different problem has developed in a few of the nation's larger cities. For a variety of reasons (e.g., reluctance by some parents to indicate employment status, racial differences between school policy and resident's interests, illiteracy) difficulties have been reported by some big city school systems in using the student surveys. These problems could be expected to be aggravated in their importance if public housing were used as a basis for calculating entitlements. While these difficulties may be significant, there appears to be no readily available method to correct them.*

Some school officials have reported attempts to improve the student counts through the use of employer records. The federal government's various agencies do, of course, have records on their employees that could be matched with the last names and addresses of pupils in a school system. Some school systems have complained that less than complete cooperation has been received from the federal agencies in making such lists available. Should the P. L. 874 program in effect in fiscal 1971 still have a significant percentage of entitlements from large cities (where the count problems are most pressing), Battelle recommends that the Office of Education request the Civil Service Commission, the military departments and the heads of other agencies owning federal property to encourage their local offices to make such lists available to local school districts.

Overcounting

Whether the student surveys overcount the number of students that should give rise to full entitlements depends upon two factors: (1) whether the counts - through error or design - include students that cannot legitimately be counted under current guidelines and (2) whether current guidelines and the legislation on which they are based causes overcounting. This section deals only with the first problem.

Battelle has reviewed student count procedures in a number of school systems and actually examined student survey cards or forms intensively in several systems. This review indicated that - taking each form on its face - there was no significant indication of overcounting of students. This conclusion is fortified by the fact that the field staff of the Office of Education performs a similar review on a periodic basis. These reviews, like Battelle's, confine themselves to the returned cards or forms and concentrate upon whether they are signed, whether the property on which the parent works or lives is federal property and whether the count appears to have been taken using procedures approved by the Office of Education.

Such a review would not indicate overcounting stemming from deliberate falsification of the forms by the school district or by any parent within the district. However, both analysis and available empirical data indicate that this is not a problem. The best method for determining whether forms accurately reflect employment status is to query the employers listed upon the forms to see whether the parents claiming that employer in fact were employed by that employer on the count date. These source checks have been periodically conducted by the Office of Education, although staff limitations have precluded such action in the past five years. Past Office of Education source checks have indicated that the returned forms have been highly accurate, with no possibility of more than about 1 percent error and a considerable possibility of essentially no error.**

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*These dificulties are not serious in the districts that would continue to be impact aid recipients if the Battelle recommendations were adopted.

**A small percentage of employers (e.g., small construction contractors after they complete work on a military base) cannot easily be located. This problem accounts for a significant part of the cases in which employment cannot be confirmed. We believe, however, that source checks should be made by the Office of Education more frequently than at present, even if such action reduces the time available to conduct the student survey audits under present procedures.

In summary, Battelle finds that the student counts are the best available method for determining the number of federally connected students in a school system, that the surveys are relatively easy to administer and that they are not subject to significant errors of overcounting or undercounting, assuming the validity of the law and guidelines defining federal property.

SUMMARY AND CONCLUSIONS

This chapter has considered the value and administration of the current method of determining impact aid entitlements, namely, conducting actual counts of students with parents employed on, or residing on, federal property. The chapter concludes that such counts are the best available method for determining entitlements and that little can be done to improve the counting procedure. The chapter recommends continued counting of all those categories of students that currently give rise to entitlements, with the exception of special situations where the federal property gives rise to payments that, in effect, duplicate the impact aid payments.

This chapter has deferred the questions of counting Post Office employees and the appropriate payment rate for 3(b) students for later consideration.

(78)

CHAPTER 6: THE PER PUPIL CONTRIBUTION

PRESENT PRACTICE

Under present law, the federal government seeks to compensate school districts for the per pupil operating costs raised from local sources of "comparable" districts. In effect, the federal obligation to a particular district is determined on a per pupil basis by the local support of education (per pupil) by other districts in the same state. Because of difficulties encountered in using comparable districts, some states follow a practice of "state groupings" to determine the local contribution rate (LCR). These groupings, in effect, determine the rates for every district in the state on the basis of local contributions of districts deemed to be within a comparable category.

The use of comparable districts and state groupings would tend to indicate very low local contribution rates in states that finance a high percentage of education from state sources, have very low expenditures per pupil, or both. This result has been deemed to be politically unacceptable because the resulting local contribution rates could be as much as ten times as high in one state as in another. This problem has been solved by permitting a district to take either one-half the national or one-half the state average per pupil operating costs as their local contribution rate.

Because of presumed problems with the availability of data, local contribution rates are calculated on the basis of expenditures two years preceding the year for which the federal payments are being made.

Normal procedure for the calculation of local contribution rates in most states begins with a review of the basic four alternatives (half state average, half national average, comparable districts and state groupings) by the state SAFA representative or his staff. Calculations are made to determine the impact of selections of one method or another on all of the districts in the state. On this basis a decision is made between state groupings and comparable districts, usually only after consultation with the districts involved. Where comparable districts are used, the state frequently provides the districts with the data to be used and sometimes suggests which districts might appropriately be considered to be comparable. In selecting between the use of comparable districts and state groupings, the state must consider two factors: (1) which option will tend to increase the revenues of school districts within the state the most and (2) what impact the options will have on distribution of funds among districts. Frequently, an option that makes districts in the state better off as a whole will leave some districts significantly worse off by giving them a lower local contribution rate.

Districts within a state using comparable districts or state groupings retain the option to use either one-half of the national average per pupil expenditure or one-half of the state average. This means that a state can have some districts that take on the basis of groupings or comparables while others in the state use national or state averages. Districts naturally select the local contribution rate that maximizes their entitlements.

PRESENT LOCAL CONTRIBUTION RATES

Table 6.1 below shows the methods of calculating local contributions by state for the districts that returned the Battelle questionnaire. While the responses from the districts are not totally reliable (some of the smaller districts did not accurately report their local contributions) the data do provide a good indication of relative reliance on different methods of calculating local contributions.

TABLE 6.1. METHODS USED TO CALCULATE LOCAL CONTRIBUTION RATE AS REPORTED BY P. L. 874 RECIPIENTS

	One-Half State Average	One-Half National Average	State Groupings	Comparable Districts	Total
01. Alabama	4	25	1	0	31
02. Alaska	8	0	1	0	9
03. Arizona	3	16	46	2	71
04. Arkansas	1	27	0	1	30
05. California	106	9	137	2	277
06. Colorado	3	0	2	57	62
07. Connecticut	6	0	1	17	25
08. Delaware	5	0	1	0	7
09. D. C.	1	0	0	0	1
10. Florida	2	19	2	0	23
11. Georgia	4	36	0	0	41
12. Hawaii	1	0	0	0	1
13. Idaho	3	10	1	16	30
14. Illinois	40	2	5	61	118
15. Indiana	13	31	4	14	62
16. Iowa	13	1	9	2	30
17. Kansas	4	0	95	1	104
18. Kentucky	3	32	3	2	40
19. Louisiana	1	5	0	0	6
20. Maine	1	19	0	26	46
21. Maryland	0	0	14	1	15
22. Massachusetts	2	0	4	103	109
23. Michigan	32	3	8	5	50
24. Minnesota	41	2	5	2	51
25. Mississippi	2	6	0	1	9
26. Missouri	12	10	38	3	65
27. Montana	10	0	10	75	97
28. Nebraska	6	1	22	1	32
29. Nevada	10	0	1	1	12
30. New Hampshire	0	0	1	47	48
31. New Jersey	36	2	108	4	157
32. New Mexico	7	22	3	1	34
33. New York	49	3	17	44	121
34. North Carolina	3	20	0	0	24
35. North Dakota	4	1	27	1	33
36. Ohio	14	29	35	5	86
37. Oklahoma	11	72	13	71	179
38. Oregon	7	1	23	3	40
39. Pennsylvania	26	2	4	34	67
40. Rhode Island	0	0	1	14	16
41. South Carolina	1	11	0	1	13
42. South Dakota	1	0	31	1	34
43. Tennessee	1	63	2	0	68
44. Texas	56	114	31	5	212
45. Utah	2	17	2	0	23
46. Vermont	0	1	0	11	12
47. Virginia	3	35	0	12	51
48. Washington	79	0	61	13	161
49. West Virginia	1	6	0	0	7
50. Wisconsin	9	2	25	5	44
51. Wyoming	5	0	0	7	12

In reviewing Table 6.1, it is important to recognize that the table reflects the superintendents' answers to a Battelle questionnaire question on how local contribution rates were determined. These answers deviate somewhat from the actual local contribution rate choices shown on Office of Education records by virtue of mistaken impressions by local officials on how they calculated their rates. For example, within any given state the estimates used to calculate one-half of state average and one-half of national average per pupil costs will be identical. In that state one number will be higher than the other and districts naturally can be expected to select the higher of the two. Thus, one would expect to find no districts claiming state averages in a state that had other districts claiming on the basis of national average. The fact that the figures for many states show choices in both columns is an indication that the underlying data is not perfectly adequate. However, Table 6.1 serves adequately its basic purpose of showing the use of various local contribution rate methods among the various states.

The pattern shown by this table is comparable to what one would expected based upon the patterns of school finance in the various states. Those states with a high percentage of total educational costs defrayed by the state (and thus a low percentage by the districts' local contributions) use either one-half state average or one-half national average as their local contribution rate. Their choice between these two is determined by whether the state's expenditures per pupil is greater than the national average. If it is, the districts in the state chose the state average method. Some states that do not have extremely high state aid per pupil also use the one-half national average method because of generally low levels of per pupil expenditure and thus relatively low local contributions. Primarily, such states are found in the South – though many southern states combine the situation of relatively low expenditure per pupil and a high percentage of total costs defrayed by state aid. The choice of one-half of national or state averages is also made by districts with low local effort (usually resulting in low per pupil costs) that are located in high expenditure states.

The potential to select comparable districts provides for considerable variation in local contribution rates within a state. This is particularly the case in states that have a large number of districts, and thus more of a population to choose from in selecting comparable districts. For example, Oklahoma has a large number of very small (ADA less than 500) school districts. Naturally, some of these districts happen to have very high property valuation per pupil because they contain a large industry. This high valuation permits the maintenance of very high local tax revenues per pupil on the basis of very low tax rates. There are enough such districts in Oklahoma to permit the selection of such districts as comparables, thereby sustaining some local contribution rates approximating $1000 per pupil.

By contrast, a state with exactly comparable distributions of property and pupils, but with larger districts, would not be able to develop such a high local contribution rate. For example, Virginia and several other states organize school districts on city and county lines, with the result that high industrial valuation properties are in effect spread over a large number of pupils, thereby avoiding the small rich (and small poor) districts that are found in a state like Oklahoma. The distribution of local contribution rates for 1967-68 is shown in Table 6.2 below. For fiscal 1970 the local contribution rates are naturally higher, but there distribution tends to remain relatively stable from year to year. This table was developed by Battelle from records on fiscal 1968 entitlements supplied by the Office of Education.* The table indicates the high concentration of districts, pupils, and (to a lesser degree) entitlements in the local contribution rate range below $300.

These differences in the method used to calculate local contribution rates suggest that average local contribution rates would differ substantially among the various states. That this occurs is evident from Table 6.3, which shows the average local contribution rate for all states for fiscal 1968. The table indicates (contrary to some of the questionnaire responses shown in Table 6.1) that some states had districts claiming without exception the one-half national average local contribution rate of $255.78. Those states were Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, New Mexico, North Carolina, South Carolina, Tennessee, Utah, and West Virginia. Most of these states are southern or border states that combine lower than average per pupil expenditures with a relatively high percentage of educational costs defrayed through state aid. On the other hand, the states having an average local contribution rate in excess of $400 (Alaska, Connecticut, Illinois, Iowa, Massachusetts, New Hampshire, New Jersey, New York, Oregon, and Rhode Island) tend to be states with high per pupil expenditures and relatively lower reliance upon state aid, and thus greater reliance upon local taxes, for the financing of education.

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*These calculations exclude about 50 districts that were excluded from the file by Battelle because these records were being used for a separate analysis. Inclusion of these districts would not materially affect the distributions in Table 6.3.

77

TABLE 6.2. DISTRIBUTION OF DISTRICTS BY VARIOUS LOCAL CONTRIBUTION RATES, 1967-68

LCR		Percent of		
Minimum	Maximum	Districts	Entitlements	Federally Connected Children
0	275	38.4	35.3	43.7
275	300	14.5	8.8	9.7
300	350	14.5	20.6	20.5
350	450	19.0	21.7	18.1
450	550	9.5	7.6	5.1
650	700	2.2	3.1	1.6
700	1100	0.9	2.8	1.2

Source: See text.

TABLE 6.3. AVERAGE (TO NEAREST DOLLAR) LOCAL CONTRIBUTION RATES BY STATE, FISCAL 1968

One-Half National Average	
Alabama	$256
Arkansas	256
Florida	256
Georgia	256
Kentucky	256
Louisiana	256
Mississippi	256
New Mexico	256
North Carolina	256
South Carolina	256
Tennessee	256
Utah	256
West Virginia	256

From $256 to $300	
Arizona	289
Hawaii	269
Illinois	295
Michigan	268
Minnesota	285
Nevada	275
Oklahoma	285
Texas	263
Washington	285

From $300 to $350	
California	320
Delaware	315
D. C.	308
Indiana	309
Kansas	301
Maine	340
Maryland	339
Missouri	307
North Dakota	304
Ohio	318
Pennsylvania	332
South Dakota	346
Vermont	314
Virginia	321

From $350 to $400	
Colorado	391
Montana	358
Nebraska	398
Wisconsin	365
Wyoming	396

From $400 to $450	
Connecticut	402
Illinois	407
Iowa	406
New Hampshire	427
Oregon	407
Rhode Island	410

Over $450	
Alaska	589
Massachusetts	510
New Jersey	471
New York	480

Source: Administration of Public Laws 81-874 and 81-815, Eighteenth Annual Report of the Commissioner of Education, p 75.

ADMINISTRATIVE PROBLEMS OF THE LOCAL CONTRIBUTION RATE

The calculation of local contribution rates and reviews of those calculations present the area of the P. L. 874 program with the greatest degree of administrative discretion and a significant aspect of the workload in the review of applications.* Within any state, school districts will usually differ in a significant number of characteristics. These include:

- Size as indicated by total average attendance or enrollment
- Density as measured by students per square mile
- Type of place serviced, e.g., rural, suburban, city
- Grades covered; some states have districts serving kindergarten through Grade 14, others kindergarten through Grade 12, and still others have some separate elementary and high school districts
- Legal status, e.g., combined, independent, county unit, etc.
- Property tax base per pupil
- Tax rate
- Pupil-teacher ratio
- Average teacher salaries
- Expenditures per pupil.

The existence of these variables (and others like them) mean that no two school districts in any state are exactly comparable in all respects.

Given that circumstance and the necessity to develop comparable districts (or groupings of comparable districts) the states and recipients of impact aid are confronted with the problem of picking comparables for determining local contribution rates. In most states, the decision rule adopted tends to be to pick the highest local contribution districts as comparables that the Office of Education will allow. We can see no reason to fault the states and districts for this as they are simply trying to get all of the funds to which they are legally entitled. Without controls it would be reasonable to expect that ultimately every state would – if it could – pick comparables that were the highest local contribution districts in the state.

Naturally, the Office of Education must adopt guidelines to preclude the use of unreasonably high local contribution rates. The problem is to determine what is an "unreasonably high" rate where presumably a rate set through comparable districts is the only definition of reasonableness. One approach to the problem is to look for districts that are comparable in as many of the relevant characteristics as possible. In some cases, this can be approximated as, for example, in the case of near average suburban districts in a state with a number of large cities. However, lacking a definition of relevant comparison criteria, there is no way to tell when districts are really comparable.

In practice, comparable districts tend to be restricted to districts not having very major deviations in terms of size and geographical character from the applicant. Given this constraint, the major review criteria seem to relate to degree of federal impact – generally the use of comparables with significant federal impact is discouraged – and to the impact of the proposed comparables or groupings upon the overall P. L. 874 budget. Certain rules of thumb have tended to develop without economic logic, e.g., holding the increase in LCR from one year to the next to a fixed amount and trying to encourage the use of comparables that have about the same local contribution per pupils as the applicant's local revenue per non-federal (total ADA minus (a) and one half of (b) pupils) pupil. All in all, the comparable district calculations are a major weak point of the present program.

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*Although the situation is not widely recognized, the Office of Education has considerable potential to vary the costs of paying full entitlements under P. L. 874 through the decisions it makes in accepting or rejecting the choices of comparable districts and state groupings offered in the applications for assistance.

THE THEORY OF THE LOCAL CONTRIBUTION RATE[*]

The use of per pupil payment is a less than ideal way to determine impact aid entitlements. As noted in Chapter 2 the ideal entitlements formula would calulate the total costs of education in the district, subtract the total costs that would have been incurred if there had never been a federal impact on the district and pay the difference between those costs after subtracting the added revenues made available from the federal activity. Those added revenues would be derived by taking the actual revenues of the district and subtracting what those revenues would have been if there had never been a federal impact on the district, but if the district continued to levy the same tax rate as it does currently. Unfortunately, this formula is unworkable because there is no correct way to estimate what either the costs of education in the district or the revenues of the district would have been if there had never been a federal impact on the district.

In some cases there can be little question but that the federal impact on some districts has been quite favorable, even though those districts assume responsibility for educating substantial numbers of federally connected pupils. On the other hand, it is probable that the federal impact on other districts (probably including some that do not now have any federally connected students) has been negative.

Because the federal impacts cannot be measured through the conceptually correct formula stated above, this chapter and Chapter 5 are devoted to an alternative method of calculating impact. That method is like the current impact program in that it counts the number of students on which payment will be based and multiplies that number by some rate of payment.

This discussion of per pupil payments thus implicitly accepts the assumption that the student counts provide an accurate way of measuring the net increase in students that the federal government causes or, alternatively, the loss of property tax revenues from the fact that students already in a school system have parents that work on tax exempt property who, but for the impact of the federal government, would otherwise work on taxable property (and in the process "cause" the tax base of the district to be larger). While, the assumption that student counts lead to an accurate measure of burden is clearly not perfect, it is a better assumption to make than the assumption that federal impact bears no relation to the students counts at all.

The current method of differentiating the burdens of (a) and (b) students involves paying a percentage of the local contribution rate of (a) students on the (b) students, on the theory that some percentage of the costs of educating (b) students is met through taxation of the residence of the student. Following this approach, this chapter concentrates attention upon determining the appropriate per pupil federal payment for the (a) students. This chapter, like the current program, begins with the assumption that no additional tax revenues are generated in a district as a result of the location of (a) pupils in that district.[**]

With all these assumptions, the question of deriving a local contribution rate is quite simple. That question boils down to: What is the added cost of educating one additional federally connected pupil? To provide a simple example, the question is: When the federal government transfers a military officer to Fort Sill, Okalahoma (without transferring any other officer out of Fort Sill), what added costs are imposed upon the Lawton, Oklahoma, schools if that officer happens to have one school age child?

One simple way to answer this question is to assume that the costs of educating one new pupil will be the same as the costs per pupil for pupils already in the system. That is, if the district spends $600 per child it will tend to expand its program to spend $600 for any additional children entering its school system. It can be argued that adding a pupil costs less (or more) than the average of the costs of educating pupils already in the district.[***] In its field investigations, Battelle did encounter one important circumstance where average costs of educating local pupils and costs of educating federal pupils do tend to differ. These situations come about because of the differneces in average costs between high school

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[*] The analysis of local contribution rates in this chapter relies heavily upon the conceptual framework established in Chapter 2. Readers seeking to understand completely the recommendations of this chapter should be sure that they understand the conceptual framework of that chapter.

[**] An alternative assumption with an identical effect is that the added tax revenues generated by the federal activity are exactly offset by the added costs of educating non-federally connected students caused to be in the district as a result of the same indirect economic effects that cause the added tax base.

[***] This issue is considered in Chapter 2. With the exception of the concentration of military dependents in elementary grades, the administrative cost of trying to reflect any differences in marginal and average costs would far outweigh any potential gain in the accuracy of a formula for impact aid.

80

education and elementary education. Because high school education tends to cost significantly more per pupil, the overall per pupil cost in a district will differ from the federally connected childrens' cost to the extent that the distribution of federal pupils (percentage in high school) differs from the school district average. Spot checks of this situation indicated that in schools near military bases the federally connected students tended to be concentrated in the elementary grades to a greater degree than the non-federal pupils. As a result, in these areas a local contribution rate based either upon comparable districts or the recipient districts' own per pupil costs will tend somewhat to overpay the district.

Unfortunately, there is no administratively simple way to reflect the differing distribution of federal students among grades. It would be a simple matter to keep data on the grade distribution of federal and non-federal students – these data are in effect already in existence through the student surveys. However, the obvious method of multiplying a count of elementary pupils by an elementary per pupil cost and doing the same thing for high school students depends upon the existence of accurate data distinguishing per pupil high school costs from per pupil elementary costs. Such data do not exist and cannot be made available at a reasonable cost.

Data on national average relationships is not available and would be misleading if it were. Some districts may operate with a very high per pupil cost in high school as compared to elementary schools while other districts may operate with a much lower differential and some may not even have a differential. School systems have many costs such as central office overhead, maintenance services, utility payments and the like, which are not maintained on a basis that would permit them to be allocated easily between elementary and high schools. Such data could be developed but the total administrative costs of doing so might well be as large as the funds the federal government could save by making recipient districts keep such data. In addition, the federal government would have to maintain a large audit staff to review such data even if it could be developed by the school districts.

It would be possible to develop an approximation of the relative costs of educating elementary and secondary school students through use of per pupil expenditure data in states that have separate elementary and secondary school systems and assuming that the relative costs of those systems were good indicators of relative costs for the nation as a whole. However, the resulting approximation would, for the reasons noted above, not necessarily be a correct reflection of relative costs in any individual impact aid recipient district. Although such an approach would not require individual recipients to keep separate sets of books for elementary and secondary schools, it would require them to file applications indicating students by grade, thereby complicating administration of the program.

Another approach is simply to recognize that a local contribution rate that is not sensitive to the concentration of military dependents in low cost elementary grades is likely to overstate the obligations of the federal government to districts educating such children. This approach is adopted here as – as will be shown in a subsequent chapter – the overpayment effect tends to be cancelled by the underpayment effect of assuming that the tax revenues generated by military families are as large as those of civilian families.

Given this conclusion, the appropriate rate of payment for each federally connected pupil for whom the federal government assumes responsibility is the average per pupil cost in the district educating such students, or a reasonable approximation of what that cost would have been if the district had not had any federal impact.

COMPARING THE CURRENT PROGRAM TO THE THEORY OF THE LOCAL CONTRIBUTION RATE

Given this definition of the approach for determining the local contribution rate (per pupil payment for the federal government), it is possible to examine the ways in which the current local contribution rate differs from the theoretically sound one to see if there are reasonable reasons for such differences to exist.

Use of Preceding Years' Data

Under the current impact aid program the federal government actually pays not the current per pupil cost but the per pupil cost from two years preceding the year for which payments are being made. There is no logic to support this situation. It developed because of the presumed impossibility of obtaining accurate data for the current year for school systems. To make comparable district calculations a district must know financial data about other districts. Normal state reporting leadtimes mean that such information is frequently not readily available on a current basis. Thus, preceding years are used.

This means that under the current program districts are, on the average, underpaid (assuming the theory of the current program is correct) by about 10-15 percent, the average increase in per pupil costs over a 2-year period in the United States.

There is no defensible reason for a local contribution rate that does not approximate current costs. If for some reason the estimation of per pupil costs in an applicant district (or a comparable district) were considered to be difficult to administer, the local contribution rate could be improved by adjusting the prior year rate by a factor intended to reflect the average annual increase in per pupil costs. For example, the local contribution rate determined under the current formula could be multiplied by 1.1 for every district, presuming an annual 5 percent increase in per pupil costs. The factor used for average annual increase could be written into the impact aid legislation, or could be estimated each year by the Office of Education.*

A much superior method is to use the per pupil costs of the applicant district (or of comparable districts) on a current basis. These costs can be estimated with considerable percision. For example, if one wanted to use current costs in a fiscal year 1971 impact aid program, application forms filed in the fall of 1970 for the 1970-71 school year would be used to calculate entitlements. By the beginning of the school year (Fall, 1970) the school district will already have adopted a budget that will contain a quite accurate prediction of enrollment and of local, state and federal (non-impact aid) revenues.** Other districts that might be used as "comparables" would also have developed their budgets by that time. These school budgets could be used to develop the impact aid entitlements on a current year basis. When the school year closed and after expenditure reports were available, any overpayments or underpayments (which would normally be quite small) could be handled by adjustment of a subsequent year impact aid payment.

Exclusion of Federal Contributions

Obviously, the federal government should not be asked to pay twice for the costs of educating federally connected students. For that reason the federal costs of education paid through such programs as Title 1 or the Elementary and Secondary Education Act are appropriately excluded in concept from expenditures used to determine the federal per pupil contribution.

Exclusion of State Contributions

As indicated at length in Chapter 3, it is difficult to say whether the burden of federal activities is greatest on the states that have those activities or upon the states that do not have them, but whose citizens are taxed to pay for them. For the reasons considered in detail in that chapter, Congress in enacting P. L. 874 decided to exclude reimbursement of state costs of educating federally connected pupils. On economic and educational grounds, direct payments to states for the state contributions to education of federally connected pupils cannot be justified. Whether payments to states make sense on some other basis is an issue considered later in this chapter.

Regardless of whether states should be paid for their contributions to the costs of educating federal pupils, there is no reason to pay the districts for the state's contributions and thus state contributions should be excluded from the district's per pupil costs for the purpose of calculating entitlements. The current program does not consider state payments in calculating local contribution rates, but does, in effect, reimburse districts for costs incurred by states in the case of those districts that receive payments based upon one-half national or state average of per pupil costs.

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*In its projections of educational statistics series, the Office of Education already makes such estimates.

**In a heavily impacted district, however, local tax rates (and thus revenues) are not independent of the amount the district expects to get as impact aid, a problem addressed later in this chapter.

Exclusion of Capital Costs

Because a separate program (P. L. 815) exists to cover capital costs associated with educating federal pupils, capital costs are not included in the local contribution rates used for P. L. 874. Whether this difference in treatment of capital and operating costs is appropriate is considered at length in a subsequent chapter.

Exclusion of Nonschool Costs of Education

In practically every state in the nation local governments make some contributions in kind to the operation of schools. These governments provide police and fire protection, frequently water supply or other utilities and the like without (in most cases) charging the school system. Economically, these costs are part of the cost of educating students. However, the difficulties that would be encountered in calculating them would be substantial, the costs involved are small, and to pay them would require establishing a whole new set of P. L. 874 recipients – namely, the municipalities and other local governments that bear these costs. For these reasons such contributions are not included in the local contribution rate.*

In certain states, school districts are actually a part of some other level of government. In Virginia, for example, counties run the schools. In New England, municipalities run the schools. In these cases school officials usually share common buildings with municipal officials and municipal officials perform many functions (e.g., accounting and purchasing) that are carried out by school districts in states where such districts are separate local governments. Under current practices these costs, which are not a part of school budgets, cannot be counted for the purpose of calculating the local contribution rate. Although some added administrative costs are involved in including such costs, it would appear inequitable not to consider such costs as part of the educational costs of a district.

Implications of the Comparisons

In summary of the above discussion we have concluded that an appropriate approach to the per pupil payment is to begin with the average cost of educating a child in the recipient district. However, because particularly in a heavily impacted district that cost may have been heavily influenced in the past by the impact aid available and, will in the future, depend upon the amount of impact aid, it may be necessary to use some other standard for average cost per child. Such a cost estimate might be established by reference to comparable districts, by reference to state averages or by references to national averages. Alternatively such cost could be established arbitrarily as someone's determination of what the cost should be. Assuming for the moment that the per pupil costs of providing education for one federal child can be established, we can compare the various approaches to calculating that portion of the cost which the federal government should pay.

The current program seeks to adopt the logic cited above through the use of comparable districts and state groupings. Instead of starting with per pupil costs in the district and subtracting state aid and other federal programs, it in effect starts with per pupil costs in other districts considered to be comparable and subtracts state aid and other federal programs to arrive at locally raised revenues per pupil – the local contribution rate. Because expenditures per pupil in any district are the sum of locally raised revenues, state aid and federal aid, the current method of developing local contribution rates amounts to simply taking the local contributions per pupil in the comparable districts as the local contribution rate of the applicant district.

By focusing directly upon the locally raised revenues of the comparable districts rather than the per pupil expenditures, the present method avoids the labor or calculating per pupil expenditures and subtracting state aid and other federal aid. However, the price of this simplification is that the current local contribution rate fails to reflect the key characteristics of the applicant district that differ from the comparables. Once the comparable districts or state groupings are selected under current procedures the formula is totally insensitive to:

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*If a municipality provides a service for which it bills the schools, such a cost would be counted in the local contribution rate just as if the municipality were a private supplier.

(1) Changes in the local tax rate of the applicant

(2) Changes in the local tax base of the applicant district

(3) Changes in the tax revenues (tax rate times base) of the applicant district

(4) Changes in the state aid of the applicant district.

This insensitivity of the present formula is a consistent source of over the underpayments to recipient districts. For example, when the federal impact really does cause a reduction in tax base per pupil in the applicant district, by implicitly assuming that the state aid per pupil in the applicant district is the same as in the comparable district, the present formula will tend to overpay such a district.* The reverse situation obtains when the state aid per pupil in the applicant district is lower than in the comparable districts.

When the applicant district provides for higher per pupil costs by raising its local taxes the federal payment fails to reflect this change. Conversely, if the district uses the federal impact funds to, in effect, lower its local tax rate below that of the comparable districts, the comparable district method makes the impact aid payment insensitive to such a change.

As a result of these characteristics the present impact aid program has no built-in way to protect against overpayments. When per pupil expenditures begin to rise in recipient districts (for example, as a result of the pyramiding of state and federal aid), the state aid payments do not adjust because by law they cannot take the federal aid payments into account. Likewise the federal aid formula does not take the state aid payments to a particular district into account, nor does it consider special resources that one district may have (such as high payments in lieu of taxes or shared revenues) that the comparables do not have. Under these circumstances, the only source of funds that can vary is that raised locally. Thus it is not suprising that some of the major recipients of impact aid have simultaneously higher per pupil expenditures than comparable districts and lower tax rates. This situation today is probably even more serious than that indicated by the 1967-68 data reported in Chapter 4 because since that time many states that took federal aid into account in determining how much state aid to pay have been forced to discontinue the practice.

DEVELOPING NEW WAYS TO CALCULATE PER PUPIL PAYMENTS

Avoiding Per Pupil Payment Calculations

One approach to per pupil payment calculations is to avoid making such calculations at all and, instead, focussing attention on the overall financial situation of the district. Using such an approach the federal government could determine the reasonable per pupil costs by looking to per pupil costs in comparable districts (or by using national or state average per pupil costs) and determine what educational costs in the applicant district should be by multiplying those per pupil costs by the number of pupils in the district. The result would be the total expenditures necessary to provide a reasonable (as measured by the comparables) standard of education in the district. From this total, the federal payment would be determined by subtracting the amounts available from state aid, local taxes, and other local receipts (special fees, fines and similar earmarked revenues, earnings in investments, etc.) to arrive at the total payment. This approach is reflected in Section 3(c)(4) of current legislation which permits such calculations in the case of districts with more than 50 percent of students who are 3(a) students. In effect, districts are permitted to take the higher of the amount determined by this approach or the amount determined by the regular method of calculating impact aid entitlements. The fact that only a handful of districts currently apply under this section is an indication of the generosity of the current formula.

By adopting this approach the federal government would, in effect, be saying to recipient districts that it will guarantee that children in the district receive a reasonable standard of education. Under this approach the federal government would be assuming responsibility for federally connected and non-federally connected students alike.

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*That is, the combination of federal impact aid, state aid and local resources that would be obtained with local revenues in the applicant district that are comparable on a per pupil basis to the comparable districts will give the applicant higher expenditures per pupil than the comparables.

Implementation of this approach requires that a formula be developed that is not unstable – that is the payments must not be allowed to vary on the basis of the payments. Normally, the district will set its tax rates after considering the amount of federal and state aid expected to be available. Thus, unless a correction is introduced, the local revenues available would depend upon the federal aid expected to be available and the federal aid would depend upon the local revenues.

To correct this problem the federal government must presume some local resources to be available independent of the actual tax raising decisions of the applicant district. To establish this a reasonable tax effort can be defined on a basis similar to that used to establish a reasonable level of expenditures per pupil. If the district is to be provided with a level of expenditures that is based on those of comparable districts within the same state, it should be asked to make a tax effort that is reasonable by comparison with those same districts. Thus, the federal government would pay any funds required to meet the difference between the total expenditures required for a comparable standard of education and the combination of state aid actually available and the local revenues that would be available if the district had a tax rate that was comparable to other districts.

If such a formula were used it would be necessary for the federal government to continue to prohibit states from offsetting the federal payments in determining state payments. Otherwise, the state payment would be a function of the federal payment, but the federal payment would also be a function of the state payment, so the actual payments could never be calculated.

This type of formula does what the current use of comparable districts and state groupings is supposed to do, but does not accomplish in practice. It gives a recipient district a standard of education (measured by per pupil costs) equivalent to that of comparable districts when the district makes a reasonable local tax effort (as measured by the tax rate of the comparable districts). Unlike the present formula, it tends to have a built-in self-correcting feature in that if an applicant district seeks comparable districts that have high per pupil expenditures, it would find that it is likely to also have picked comparable districts with high tax rates.

When this approach is used to determining the federal contribution the per pupil payment is never calculated, except as a matter of academic interest. To the extent that current P. L. 874 payments allow some districts to have rather higher than average expenditures with lower tax efforts, the payments under this approach would be lower than those under current law. On the other hand, in those cases where the current federal payments do not achieve a reasonable standard of education for recipients making a reasonable tax effort, this approach would make higher per pupil payments than existing law.

This approach to determining the federal contribution is only appropriate where the federal impact on the district is major. For example, it could be used in those cases where the federal impact – measured by taking all of the (a) pupils and some fraction of the (b) pupils – as a percentage of total pupils – is greater than 50 percent.

Option One: Making Per Pupil Payments by Matching Local Per Pupil Contributions

For those districts where the approach discussed above would not be appropriate because federally connected pupils are a small proportion of total pupils, some approach that related the federal payment to the financial situation of the recipient (rather than a comparable district) would be appropriate. A strong argument can be made that the simplest and most effective local contribution rate is one in which the federal government simply pays for every federal pupil the same amount as the district pays for every non-federal pupil in the same year.

The logic of this local contribution rate can easily be illustrated. Suppose a district begins operation with 100 pupils, an assessed value per pupil of $20,000 and a tax rate of 1.5 percent (15 mills) for school purposes. That district will be raising $300 per pupil from local sources. Now the federal government introduces 100 additional pupils into the district (as a result of military housing on a new base in the district). Because the tax base is unchanged but the number of students has doubled, the tax base per pupil has been cut in half. If no federal assistance is provided, the district will have its revenues per pupil cut to $150 with corresponding adjustments in educational programs, unless it raises taxes. If the district wants to keep the same quality of education it had before the federal impact it would have to double its taxes.

(85)

In this assumed situation, and the many real world situations that correspond to it, the federal government can make the district whole (that is, leave it exactly where it was in education standards and taxes before the federal impact) simply by paying for each federal pupil what the district itself raises for each local pupil. In the example, the district would have 100 non-federal pupils and with its tax of 1.5 percent would be raising $30,000 or $300 per pupil. If the federal government pays $300 for each federal pupil, the district will have the same expenditures per pupil and the same tax rates as it would have had if there were no federal impact.

The counting of students for this approach to an impact aid formula would be considerably less complex than under current procedures.* Instead of requiring all districts to use a single method (average daily attendance) which may not be necessary to comply with state regulations and may not be used by the district for its own purposes, this calculation of local contribution rate can be used with any method of counting pupils, provided only that the method used for counting federal pupils and non-federal pupils be the same. A district could use average daily membership (ADM), average daily attendance (ADA), enrollment, or any other concept.

By using ADM rather than ADA a district would tend to increase its count of federally connected students, by some five percent. However, under the method shown the district would be increasing its student count by 5 percent by changing from ADA to ADM, but would also be reducing its local contribution rate by 5 percent because the local contribution would be divided by a larger student count.

This option for calculating local contribution rates has a number of advantages. Some of these advantages are particularly significant in the context of the present P.L. 874 program. One main advantage of the option is that is provides an automatic correction against major overpayments to districts that result in lowering local taxes. The current methods take no account of what is happening in the district receiving assistance. Instead, they base payments on what is happening in other districts in the same state (state groupings, comparable districts, and one-half state average per pupil costs) or districts in all states (one-half national average per pupil costs). As a result, it would be theoretically possible for a district to collect all of its revenues from the federal government, cut its local taxes to zero and continue to receive federal payments at the same rate it would even if it were making a reasonable local effort. Under this option the lower the local effort, the lower the federal payment would become.

Another advantage of the option is that it is both simple to understand and simple to administer. Conceptually the option says to local taxpayers, "For every dollar you raise from local sources for your local pupils we will raise a dollar for each of the federal pupils". Because the option does not require a district to learn about the expenditures and taxes of other districts to fill out its application, the applications should be easier to execute and review.

The major disadvantage of the option is that it measures local effort by taxes raised, which are the result of the district's tax effort (as measured by its tax rate) and its affluence (as measured by its per pupil tax base). Such a local contribution rate pays more to districts with a high tax base per pupil than to a poorer district. For example, this option would pay roughly three times as much per pupil to Arlington County, Virginia, as to the average district in Virginia (which levies about the same tax rate as Virginia) but only have about one-third as much tax base against which to apply that rate.

This phenomena explains why the Stanford Research Institute report on impact aid issued in 1965 indicated that some of the districts in the Washington, D.C., area were being underpaid by the impact aid formula. Using a standard of payment comparable to that discussed in this section Stanford indicated that Arlington County, Virginia (with a local contribution rate higher than most other districts in Virginia) was being underpaid by about $150 per 3(a) federal pupil.**

The second major disadvantage of this option is that it gives the school district, rather than the federal government, credit for the indirect economic impact of federal installations. If the federal government had caused indirectly a sharp increase in the assessed value per pupil in the district, basing payments upon local taxes divided by local pupils would tend to overpay the district.

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*This comment is also applicable to some of the other options discussed below.

**Stanford Research Institute, Impacted Areas Legislation: Report and Recommendations, U.S. Congress, Senate, Committee on Labor and Public Welfare, Committee Print, 89th Congress, 1st session, 1965, p 104.

The third major disadvantage of this option is that it tends to exaggerate the overestimation of burdens (or any underestimation) inherent in the student counts. When the per pupil payment is determined by dividing local revenues by local pupils (defined as total pupils minus federal pupils), any overcount of federal pupils will reduce the local pupils and thus inflate the payment rate. This inflated payment rate then would be paid upon a number of pupils that also reflected the overestimate of federal pupils, thereby double paying for an overcount.

The above three problems indicate that matching local contributions is not an appropriate method to determine per pupil contributions.

Option Two: Matching the District's Tax Rate Applied to the State Average Tax Base

The major problems of the option described above can be solved by a relatively small, but highly significant change in that option. Because local taxes are the product of the local tax rate and the local tax base, that option tends to pay more to districts with higher tax bases and less to districts with lower tax bases. If the tax base were set at some constant, such as the per pupil tax base for the state as a whole, then the per pupil payments would vary only with the district's own tax effort as measured by its tax rate.

In general, districts with a very high tax base tend to have a very low tax rate because they find that they can finance a very expensive level of education without the need for high tax rates. On the other end of the spectrum, districts with a very low tax base (particularly those in states without strong state aid programs) find that they must have relatively high tax rates to provide reasonable educational standards. Because of these relationships, this option would tend to pay less per pupil to the very rich districts and more per pupil to the very poor ones. Among districts with comparable tax base, the formula would tend to pay more to those that levied high school taxes on their local taxpayers and less to those that did not.

This option has a number of advantages when compared to the current methods and the other options. First, as noted above it does not tend to pay rich districts more than poor districts. That result may be considered by some to be an advantage. In terms of economic impact a formula that does not take local tax base into account directly or indirectly is desirable because a formula that did would tend to double pay districts whose tax base had been enhanced by the federal acitvity and underpay any district whose tax base had been reduced by the federal activity.

Second, it makes a very reasonable assumption about the likely situation in the district assuming the federal government had never had an impact on it. In effect, it presumes that in the absence of federal impact the district would tend to have had a tax base per pupil about like the current average in the state. This approach is preferable to giving the district credit or blame for federal impacts that tend to reduce or increase tax base per pupil. This assumption is much more likely to be true than the one inherent in comparable districts. For example, the impact of federal construction of a major air force base in a rural area in the Midwest is to cause a small village to develop into a reasonably large municipality. If one wanted to consider districts comparable to what the community would have been without the federal installation, the appropriate comparables would be small rural villages. In fact, the current procedures for selecting comparables would require the selection of districts comparable to the type of community the district became as a result of the federal impact, not districts comparable to what the community would have been had the federal impact not occurred.

Third, the option leaves the determination of the federal payment in the hands of local taxpayers. This approach certainly has the appearance of equity in that it says to these taxpayers, "make whatever tax effort you feel is appropriate for pupils who are a local responsibility and we will make a comparable effort for pupils who are a federal responsibility". Using the local tax rate as the determinant of the federal payment is also self-policing (assuming that the formula is not used in those heavily impacted districts where more pupils are considered a federal than a local responsibility). The approach tends to prevent underpayments because if local taxpayers perceive factors tending to cause high educational costs (e.g., extensive pupil transportation requirements) they can raise their local tax rate and with it the federal payment. More important, this approach makes the local taxpayers the guardians of the federal treasury. The only way that a district could raise its federal payments is to convince the local voters or political decision makers that additional expenditures are necessary. If school leaders cannot convince their own voters that additional funds are required, no federal official could intervene in the local decision. On the other hand, if school leaders do convince their own voters that additional funds are required, no federal official would prevent higher federal payments.

Because tax rates are normally set in advance of the year in which the taxes are collected, administering such a formula on a current bases would not be difficult (presuming that a reasonable estimate could be made of state value). Procedures would be required to reflect differing assessment ratios and to handle the circumstance of fiscally dependent school districts that do not have separate school tax rates.*

Option Three: A Uniform State Rate

One of the simplest rates to administer would be a rate that was based upon the overall average of local contributions within a particular state. States can currently opt for this alternative by establishing a single state grouping and calculating the local contribution rate on the basis of that single grouping. This option would use that same approach, but would base the calculations upon an estimate of local contributions throughout the state in the current year, rather than basing them upon contributions in an earlier year.

The major disadvantage with this option is that its simplicity is gained at the expense of failing to reflect differing situations throughout a state. To take an extreme (but not unusual) case, two districts may exist in the same state with the following characteristics. District A is a rural district in a relatively poor area of the state that receives substantial state equalization assistance, but levies relatively low local taxes. As a result it spends $400 per pupil of which only $100 is raised locally. District B, in a relatively affluent suburban and semi-industrial area, receives only $200 from the state, but maintains expenditures of $600 per pupil by virtue of raising $400 locally per pupil. A state average local contribution rate that paid, say, $250 per pupil to each of these districts might well be viewed as inequitable.

A nationally uniform local contribution rate would exhibit many of the same disadvantages in somewhat exaggerated form.

Summary of the Options

The primary problem with current local contribution rate methods is that they fail to reflect the unique situations of each district applying for assistance, and fail to make payments on a current basis. The solution to these problems is to make payments that are based upon the actual situation of each recipient in the year in which the payment is to be made. In the case of districts where the federal responsibilities are more than the local responsibilities as measured by the percentage of total students that are defined as a federal responsibility through the student counts), an appropriate payment formula would simply guarantee to the district a reasonable standard of education (measured by the per pupil expenditures of comparable districts or national or state average per pupil expenditures) provided only that the district made a reasonable local tax effort (measured by the tax effort of comparable districts or a state average). The formula could, if desired, include the flexibility to take into account special cost increasing or decreasing factors such as sparse population.

In districts where the local responsibilities exceed the federal responsibilities payments that matched for federal pupils the district's own revenues for non-federal pupils would be better than the current payment rate formulas, primarily because they would provide an automatic corrective device to prevent overpayments or underpayments. However, a much better approach is simply to put the state average tax base per pupil behind each federal pupil and let the district, in effect, levy any tax rate on that base that its taxpayers are willing to levy on themselves.

These recommended payment formulas would both, directly in one case and indirectly in the other, allow the federal government to take state aid into account in determining the federal payment. As a result, the formulas could not be administered unless the durrent prohibition against state aid formulas taking the federal payment into account were retained.*

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*None of these problems are insurmountable. Solutions to them are discussed at a later point in the report.

MINIMUM PAYMENT PROVISIONS

The Need for A Minimum

The movement to a local contribution rate of the type defined in the options above would raise again the problem of low local contribution rates that Congress solved by allowing one-half of state and national average per pupil cost, as an alternative rate. Basing the local contribution rate upon actual local contributions, upon state average local contributions, or upon local tax rates would tend to lead to a range in state average local contribution rates of something less than $100 in some cases to more than $600 in others. The states with the highest local contribution rates would tend to be the richest in the United States and those with low local contribution rates to be the poorest. This situation was found to be inequitable by the Congress in the past and probably would be so found if it were to arise again.

The most obvious way to solve the problem is to initiate reimbursement of both state and local contributions to the education of federally connected children.** If the total of state and local contributions were reimbursed, the differences in state average local contribution rates would be the same as the differences in per pupil expenditures among the states. For the continental United States this range is relatively narrow, although obviously higher local and state contributions are found in the richer states.

In Chapter 3 it was concluded that there is no economic or educational rationale making payments of impact aid to state governments. Reflecting a similar conclusion, present law provides its minimum payments to districts rather than to states.

The impact of providing these funds to districts is to pay them more, sometimes by a substantial margin, for each federal pupil than they raise for each local pupil. Assuming that these funds do not get translated into increased expenditures per pupil (and there is no requirement that they be used for this purpose) the funds can be translated into lower than normal tax rates.

This impact can be most strikingly seen in the case of districts with high federal impact but low local contributions per pupil. For example, assume a hypothetical district with the following characteristics:

Pupils	100
Assessed Value per Pupil	$20,000
Tax Rate, percent	1/4 of 1 (2.5 mills)
Local Revenue per Pupil	$ 50
State Revenue per Pupil	500
Federal Aid (Non-874) per Pupil	50
Expenditures per Pupil	$ 600

If the federal government causes an additional 100 federal equivalent pupils to live in the district the assessed value per pupil will be cut in half, assuming that the federal equivalent children bring no tax base with them. If the district makes no change in tax rate and state and federal (non-874) assistance continue to be the same per pupil, the district's per pupil expenditures will drop to $575. If the federal government matches the local contribution per non-federal child with an entitlement of $50 per federal equivalent child, the district will continue with its regular tax rate and be able to maintain its expenditures per pupil at $600.

Suppose, however, that the district is paid a national minimum or national flat rate payment of $300 per federal child. If the district chooses to maintain its tax rate, its expenditures per pupil would jump to $725 per pupil ($25 from local sources, $500 from the state, $50 from other federal programs, and $150 from impact aid paid at $300 for half of the pupils). In such a case the district is receiving a significant gain in its educational finance as a result of the federal pupils. If the district chooses to reduce its own local effort, it could, in the example, eliminate all local taxes and still maintain an educational program at $700 per pupil. This windfall effect is inherent in any type of minimum payment formulation for P. L. 874. As noted elsewhere in this report, the example above, while hypothetical, reflects closely the actual situation under P. L. 874 in some districts in the United States.

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*On the other hand, if the current payment formulas continue to be used there is a good reason to permit the states to take the federal payments into account.

**For example, if the education of non-federal pupils were accomplished by a combination of $300 per pupil in state aid and $300 per pupil in local revenues, the Federal Government would contribute $300 per federal pupil to the state and $300 to the district.

Because of this windfall effect, if a national minimum payment is to be maintained, the funds should not all be disbursed to the local districts having federal children.

To continue such distributions to local districts tends to create windfalls, bringing discredit on the federal program involved and by implication on all federal educational programs in the eyes of the many citizens aware of these overpayments, to discourage local tax effort (and thus to subsidize local taxpayers in these districts), and to expend federal education funds where they are least needed. Payment of these national minimums to districts with low local taxes per pupil has recognized as the single most important source of overpayments in the Stanford study and is recognized by state educational authorities and even by the districts benefiting from them as a major source of problems in P. L. 874.

Thus, under the present system, the use of one-half national average as a minimum local contribution rate develops from a device to promote equalization among states into a device that actually promotes overpayments to certain districts within the recipient state.

Payment of Minimums to the States

The preceding section has indicated that it is highly undesirable to allow districts to receive the benefit of minimum payments that are established to avoid inequities among states in average local contribution rates. The section before that one argued strongly that there is no economic justification on the basis of net burden for a program of direct payments to all states. These sections, combined with acceptance of the concept of a national minimum payment, would seem to indicate a major impasse.

Fortunately, the impasse can be resolved with little logical difficulty and excellent educational results. The rationale for the national minimum payments is not really a net burden rationale, but is rather an argument that per pupil payments should be relatively similar among states for interstate equalization reasons. This being the case, the argument against payments directly to states does not stand in the way of making the interstate equalization payments to the states. Further, because the reason for the invocation of the national minimum rate is usually that the state defrays a high percentage of the educational costs in the districts, the logic of the payment would indicate making it to the states. Thus, if a national minimum payment is to be made, Battelle recommends that the difference between a district's normal entitlement and the minimum payment be paid to the state, rather than to the district, subject only to the condition that the state use the payment for elementary and secondary education.

The educational results of this recommendation are, by most standards, highly favorable.

First, the recommendation would solve a portion of the problem that has been encountered in states contemplating equalization type formulas that, because of the prohibition against taking P. L. 874 payments into account in such formulas, have been reluctant to apply such formulas because of the windfall effect they would have upon districts receiving large P. L. 874 payments. Part of this problem stems from the fact that the federal government makes impact aid payments on the basis of added student loads without accompanying tax base (which would tend to lower assessed value per pupil) and state equalization payments are made on the basis of low tax base per pupil. This means that state equalization aid and P. L. 874 payments may tend to overlap, creating significant windfalls for a few districts at the expense of the remaining districts in the same state. This problem is much more serious however in those high state aid states where the P. L. 874 payment is already much higher than it should be by virtue of the operation of one-half national average of per pupil costs. Thus, cutting back the overpayments to such districts will tend to reduce the double windfall effect inherent in the current law.

Second, the recommendation will put funds in the hands of those states that tend to have the lowest per pupil expenditures and the lowest per-capita personal incomes. In effect, the recommendation would work a transfer from the districts in those states that have been receiving surplus P. L. 874 payments to the state treasury and from there to such educational assistance as the state may devise. It seems reasonable to predict that additional funds earmarked for educational purposes would tend to be distributed by these states in a way better designed to improve the standard of education in the state than the current distribution does.

Third, the recommendation helps to clear the way for those states that seek to improve the financing of schools through greater state aid. At the moment, if a state chooses to move the financing of its education to almost entirely a state level (as Michigan is considering) it would find that some of its districts would be receiving major windfalls by being able to receive both the state payments and a local contribution rate of $300 or more from the federal government for each federally connected pupil. Under the recommendation, if a state chooses to finance 90 percent of all educational costs of its pupils (including the federally connected ones) the state would receive reimbursement of about $270 per pupil from the federal government.

Minimum Payment Rates

Because the purpose of the national minimum payment is primarily to reduce disparities in average local contribution rates from state to state, there is no way to determine what the minimum payment rate should be through examination of the economic impact of federal installations upon local school districts. However, research can indicate the consequences of various methods for determining the minimum payments.

The payment of one-half of state average per pupil costs in addition to paying one half of national average does not in any way tend to produce equalization of payments among the states. What the one-half state average minimum does is to increase (when compared to one-half national average) the payments made to those states that support a high level of expenditures per pupil.* These tend to be the states with the greatest wealth, not the least.

In practical application the one-half state average also has some strange effects under certain circumstances. For example, California has relatively high per pupil expenditures, particularly if it is permitted to count some of its grade 13 and 14 costs in determining per pupil costs. California, in common with a few other states, still has some school districts that educate elementary children but not high school children. Because the cost of educating elementary children is lower and the elementary districts tend to be in more rural areas with lower living costs and educational aspirations (to the extent they are measured by per pupil expenditures), one-half state average tends to result in the elementary districts receiving payments on the one-half state average basis.

This result has two undesirable aspects. First, it tends to make the use of the minimum payment provision the result of decisions about school district organization that really do not reflect the situation that the minimum payment is designed to correct – namely low payments in states that pay a large percentage of educational costs from state funds. Second, the use of the one-half of state average per pupil costs provision provides an incentive for states to continue to maintain separate elementary and secondary districts. This effect would probably be even more pronounced when the states were the beneficiaries of of the minimum payments rather than the districts. The use of a nationally uniform minimum payment avoids these problems.

The national minimum could be set, as at present, by relating it to the national average of per pupil costs. This allows the minimum to rise as per pupil costs rise. The minimum could relate to current year estimated national average per pupil costs, or the political compromise that set the national minimum at one-half national average per pupil costs in the next preceding year could be retained. Alternatively the national minimum could be set as some fixed dollar level, in which case the impact of the minimum would be reduced each year as per pupil costs rose.

The higher the national minimum is set, the higher impact aid costs would become and (the reverse side of the same coin) the higher the payments made to state would be. Obviously, if the national minimum is set at the same level as in current law, paying these payments to the states would neither increase nor decrease the total costs of the program to the federal government.

For the purposes of developing a recommended program, Battelle retained the substance of the decision to use one-half national average per pupil costs as a minimum payment but will shift that minimum to a current-year basis, consistent with the shift of the per pupil payments to districts to a current-year basis.

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*One-half state-average payments do not necessarily promote equalization when paid to districts as the districts receiving the payments may also get large state aid payments.

(97)

SUMMARY

This chapter has examined the methods for determining per pupil payments used under current law and alternatives to those methods. The current methods of matching local contributions per pupil of comparable districts within the same state or state groupings of districts were found to do an inherently poor job of meeting net burden of federal installations. By failing to reflect the actual state aid and local resources of the recipients, the comparable districts method will tend to overpay in some cases and underpay in others. Further, by tying contributions to activities in districts that do not receive substantial impact aid, these methods do not provide any automatic correction factor to offset a reduction in local tax effort resulting from overpayments of impact aid. New methods for determining per pupil payments were presented to correct these deficiencies. In the case of heavily impacted districts, the recommended payment formula would guarantee to a district that it could have per pupil expenditures comparable to that of those districts. In the case of less heavily impacted districts, the recommended formula would allow the recipient to collect from the federal government for each pupil for whom the federal government assumed responsibility an amount that the district would have raised if the state average tax base were available for the support of that pupil.

A national minimum payment was determined to be a political question, but the recommendation was made that if such a national minimum is used the difference between the national minimum and the per pupil payment "earned" by the districts should be paid to the states, not to the districts.

CHAPTER 7: FURTHER STEPS TOWARD THE PROGRAM

INTRODUCTION

The preceding two chapters have examined the issues of student counts and local contribution rates in some detail. These chapters left open a number of important questions including whether postal workers should be included in the program, the extent to which the rate of payment for (b) students should differ from the rate of payments for (a) students, eligibility requirements, corrections for overcounting of students, and the extent to which the tax base of a district will be allowed to affect its entitlements. This chapter examines these questions.

CONTRIBUTION RATES FOR (b) PUPILS

Because school districts obtain tax revenues from the residences of pupils whose parents live on private property but work on federal property, it is generally agreed that the per-pupil payment for (b) pupils should be lower than that for (a) pupils. This section addresses the question of how the two payment rates should relate to each other.

Conceptual Basis for the (b) Payment Rate

Two quite different concepts are utilized to define the economic impact of (b) pupils. The more satisfactory of the two is that related to the situation when the federal government causes pupils to be in a particular school district. That situation arises, for example, when the federal government opens a military installation and causes families to live near the installation who most certainly would live somewhere else if the installation did not exist. In these cases the appropriate (but second best)* measure of economic impact is to examine the costs of educating the additional pupils (which is done by the per pupil payment mechanism discussed in the preceding chapter) and the extent to which those costs are defrayed by the added school revenues stimulated by the installation – particularly the taxes paid on residences by employees of that installation.

This concept, which can be called the service burden concept of impact underlies Battelle's recommendations that impact aid payments be made on the basis of the (b) pupils.** This concept tends to focus attention on whether the pupils are in the school district because of the federal activity.

If the federal government caused the students to be in the community, then it can be argued that the federal government should defray that portion of the added costs of educating them that are not defrayed by taxes on their residences and by tax revenues resulting from the economic stimulus of the federal activity (net of the added costs of any pupils added to enrollment by that stimulus). It is this service burden concept that provides a conceptual base for the payments of impact aid funds to districts that do not contain the federal installation, and thus could not tax it even if it were taxable.

Obviously, the service burden concept does not recognize any burden when the pupils who work on federal property would be attending schools in the district even if the federal activity had never developed. In such a case, the federal activity does not cause added costs to the district and should not be obligated to provide added revenues. Practically all of the (a) pupils fit this service burden concept, as do many of the (b) pupils who have obviously been drawn to areas around military bases and defense contractors (using government owned property) by the federal activity involved.

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*The appropriate method for handling the problem addressed by this section is to avoid it entirely by using the conceptual framework for the measurement of federal impact established in Chapter 2. That framework calculates the revenue and cost position of the district with the federal impact and without. In such a framework student counts are not required at all, and thus there is no need to differentiate the effects of (a) and (b) pupils. It is only because there is no way to speculate accurately on what, for example, the Washington, D.C., area might be like if it were not the nation's capital, that the conceptual problem of payment rates for (b) pupils must be separately addressed.

**A more complete discussion of the impact of (b) pupils near military bases will be found in Chapter 5.

On the other hand, a large number of (b) pupils do not fit this concept. A working wife in New York City who happens to work for a federal agency rather than a private company, and a farmer who shifts to part time farming and work at a military installation are not, by those employment decisions, increasing the school costs of their district.

In passing, the service burden concept tends to indicate something about the relative tendency for student counts to overstate burdens in heavily impacted rather than lightly impacted districts. In an area where the federal government represents a small proportion of total employment (as measured indirectly by the percentage of pupils that are federally connected), increases in migration to the area are not likely to be caused in any direct and immediate sense by expansion of the federal activity. When, for example, a federal agency adds ten postal workers, ten shipping clerks, or ten secretaries to its work force in New York City; Baltimore, Maryland; Dallas, Texas; or Detroit, Michigan, it is hard to imagine that these jobs are filled primarily by persons that migrate to these metropolitan areas to take them. On the other hand, when the federal employment demands are far in excess of the local labor supply, as is the case when the federal government operates a large military base in a formerly rural area, it is reasonable that the labor demands are met by migration to that area. Such areas will be characterized by a high proportion of federally connected students as a percentage of total students.

An alternative and much less satisfactory concept of the economic burden of (b) students is the tax loss concept. This concept presumes that if an individual were not working on federal property he would be working on taxable private property and that the district is therefore deprived, by federal action, of the tax revenues it would receive on the property. Alternatively, this presumes that if the federal government "burdens" the school district by the non-taxability of its property, the district should receive impact aid.

One reasonable standard to apply to impact aid legislation is that even if it cannot accurately reflect an economic theory of burden that is conceptually perfect, it should at least reflect a single theory that is consistent and makes reasonable sense, and should not reflect two inconsistent theories. There is a certain tendency for advocates of impact aid to switch from one of these theories to the other, consistently selecting the theory that would maximize entitlements. For example, when discussing the federal obligation to make payments for (b) students who would be in a district even without the federal impact, there is a tendency to utilize the tax loss theory. On the other hand, when the subject turns to payments for (b) pupils who live outside the district in which the federal property is located discussion tends to revert to the service burden theory. If one accepts a tax loss theory as representing the economic impact of (b) pupils, then payments should never be made on the basis of (b) students who live outside the school district in which federal property is located. As noted in Chapter 5, over half the 3 (b) children claimed for impact aid under Section 3 (b) (2) are 3 (b) outs and an additional number that cannot be determined of the 2 (b) (3) students (whose parents are uniformed personnel) are 3 (b) outs.

If the tax loss theory is used on the basis that the federal government's refusal to permit the district to tax its installations is used, a number of interesting impact aid consequences would follow. If it is assumed that (in effect) the federal burden comes from this source, the appropriate payment would be in lieu of tax payment based upon the value of the federal property. As discussed in Chapter 3 such a payment would be much larger than impact aid payments in a few districts and much less or nonexistent in many of them.

Further, the tax loss theory tends to presume that if the federal installation were not located in the district, private taxable property of the same value would be. As an examination of the location of the nation's military bases would readily indicate, there is a very considerable probability that if military installations were not located in these areas the land involved would remain unused, and thus on the tax rolls at very low valuations.

The alternative approach to tax loss is to assume that if an individual were not working on federal property he would be working on private property that would be a basis for tax payments. Carried to its logical (but inevitable) extreme this theory would suggest that if an individual shifts his employment from General Motors to a federal agency in Detroit his decision automatically reduces the valuation of General Motors' property that is subject to tax.

Because of the difficulties of the tax loss theory, the analysis of the payment rate for (b) pupils proceeds on the basis of the service burden theory. However, it should be recognized that the resulting payment rate for (b) pupils will automatically contain an overpayment bias because it will be unable to distinguish those students in a district because of a federal activity from those who would be there whether there were a federal activity or not.

Measuring the Residential Taxes of Federal Employees

Under the net burden concept, the payment rate for (b) students – before considering any corrections for the overestimation of federal impacts inherent in the student counts – should be the added local costs caused by those students (the local contribution rate for (a) pupils) minus the tax revenues generated from the taxation of the place of residence and minus any net additional tax revenues generated indirectly by such pupils and their families.

Leaving aside the indirect effects for the moment, one way to measure the tax contribution of the parents of federal pupils would be simply to find the taxes for schools that each such parent paid to the district. As anyone who has ever worked with local assessment data knows, this approach would be extremely costly to administer.* This is particularly the case because such a method should calculate the taxes paid by the federal workers who do not have children in school, as well as those paid by those who do.**

One approach to the problem of finding a payment rate for the (b) pupils would be to relate the incomes of the federal employees to the average incomes in the community in which they live. Battelle considered and rejected this possibility on two grounds. First, while the income of a federal employee and a non-federal employee will probably correlate somewhat with the value of their residence, it would be nearly impossible to determine such relationships for the nation as a whole. Further, such relationships would only have value if the average number of children for such families could be accurately calculated. In any case, such calculations on a national level would be misleading because federal employees in one district (e.g., military enlisted personnel) are likely to have considerably different numbers of school age children per federal employee and different housing tastes than other federal employees (e.g., workers in a federal correctional institution).

One imperfect, but not illogical, way to calculate the payment rate for the (b) pupils is to take the national average of taxes paid on commercial and industrial property (as opposed to residential property) and use that percentage as the payment rate for the (b) pupils whose parents pay residential taxes. This was the basis for the 50 percent payment rate for (b) pupils in the present law. More recent analysis of the relative importance of residential valuation and commercial and industrial valuation*** would indicate that on this basis the payment rate for (b) children should be 40 percent of the payment rate for (a) children in the case of parents who work on federal property and live on private property. The logic of the 50-50 division or a 60-40 division does not fully reflect the many nuisances of burden in different circumstances. For example, there are important distinctions between military personnel living on base and civilian personnel who work on, but live off, of federal property. The military personnel are unlikely to stimulate much commercial valuation where they live because they tend to buy in PX's and commissaries, eat on base, party in their clubs and when they travel seek to put considerable distance between themselves and the military installation where they are stationed. In addition, these personnel avoid many local taxes from which they are relieved under the Soldiers and Sailors Civil Relief Act. These situations apply to a much lesser degree to military civilian employees and not at all to regular civilian employees.

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*The recommendation in the 1965 Stanford study that this basis be used (for all federal families in the district) was not accepted by the Office of Education for this reason.

**Despite this problem, Battelle did attempt one such calculation in the State of Texas in response to superintendent's contention that the per pupil residential taxes from federal employee's residences were lower than the per pupil residential taxes paid by non federal taxpayers with school children in the district. This calculation (reported in Battelle's Texas field report), based upon a sample of taxable property in El Paso, Texas, indicated that the per pupil taxes paid through the residences of federal employees were higher than those paid by the non-federal employees. Such a study is, however, inconclusive because it inherently cannot consider the residential taxes of federal employees who do not have children in public schools and the non-federally employed local residents in the same situation.

***See Census Bureau, Census of Governments, Taxable Property Values in 1967 (Government Printing Office, 1969).

In dealing with these different situations, Battelle has sought unsuccessfully to develop a relationship between payment rates for military and civilian students that would adequately reflect the differences in the direct and indirect contributions that their parents are likely to make to local tax revenues. As a result of this effort, we are convinced that no single relationship will be correct in all cases.

One important factor to remember in dealing with the distinction between military and civilian (b) pupils is that while the military parents are less likely to contribute to the development of the local economy, the military parents are more likely to have a greater percentage of their school age children in the earlier years of school. Because per pupil costs tend to be lowest in the lowest grades and highest in the highest grades, this means that any local contribution rate would (other things being equal) tend to compensate for a greater percentage of military student costs than civilian student costs.

Based upon this factor and the fact that both Battelle's recommended approach to compensating very heavily impacted districts and to correction of overcounting errors (see the following sections of this chapter) will tend to have its least effects in areas with high concentration of military personnel, we recommend that the military and civilian per pupil payments continue to be the same. Following the relative importance of residential and commercial and industrial property in the nation as a whole we accept the concept of a (b) payment rate that is 40 percent of the payment rate for (a) pupils.*

TREATMENT OF RICH AND POOR DISTRICTS

One of the most striking aspects of educational finance in the United States is the massive maldistribution of tax base among local educational agencies. Particularly in states with a large number of small school districts, some districts may have 50 to 100 times as much tax base per pupil as the district with the lowest per pupil valuation in the state. This means that in the absence of state equalization formulas (and for the substantial educational costs not covered by the minimum support levels in such formulas) some districts would have to tax themselves as much as 100 times as heavily (as measured by the tax rate) to provide the same educational expenditures as the most affluent district in their state. The reasons for these disparities, and the problems they cause have been widely discussed in the educational finance literature; those discussions need not be repeated here.

Some extremely cogent arguments can be made for eliminating richer districts (measured by tax base per pupil) from consideration for impact aid payments. First our net burden logic indicates that the burden imposed by the federal government, when it exists, takes the form of reducing the tax base per pupil in an impacted district by bringing in new pupils without a corresponding increase in tax base. This indicates that when we find a district with federally-connected pupils that has a very high tax base per pupil, there is a considerable possibility that the federal impact has been positive rather than negative. To the extent that the federal impact has caused the high per pupil tax base, additional payments for federal impact are unjustified.

However, a general rule that the richer districts should not receive impact aid would adversely affect some districts that are relatively rich, but would have been even richer if there had been no federal impact. In such cases the federal impact payment can have one of two effects, or a combination of both. The payment can be used to reduce the already low taxes for education in the district, thus benefitting local taxpayers at the expense of the Treasury. Alternatively, the payment can be used, in whole or part, to increase educational expenditures from quite high levels per pupil to even higher levels. In such cases, it is reasonable to assume that the payments might better be used to improve education elsewhere.

Thus, a richness cut-off in effect presumes that if a district has a very high tax base per pupil that per pupil tax base should be attributed to the positive effects of the federal government on the local econ-

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*This payment rate gives the federal government no direct credit for such stimulated industrial valuation as that of electric generating plants that serve federal installations. However, some correction for this stimulated impact is made through the "richness cut-off" discussed in the next section.

96

omy. In the cases where that presumption is incorrect the effect of the cut-off is simply to avoid paying funds to districts that can easily support a high level of educational expenditures without federal assistance.

The only readily available method for taking the richness of a district into account is to deal with the district's tax base per pupil. While it would be convenient to measure income in a district rather than property or other tax base, as a practical matter this cannot be done because reliable data on income organized on a school district basis do not exist. Tax base per pupil may be used in a formula for impact aid in several ways:

A cut-off point can be established so that districts with a certain tax base per pupil get no impact aid assistance at all;

A reduction in assistance could be developed that would reduce total entitlements by some factor reflecting the richness of the district;

Or a combination of these two methods can be used.

The choice of an appropriate cut-off point or method to reduce assistance to richer districts involves a number of judgments that cannot all be economically based. Because a cut-off point does avoid payments entirely to the very richest districts, while a reduction for richness would not, there is some basis for preferring a cut-off point.

A case can be made that the appropriate cut-off point is the state average assessed value per pupil on the theory that if the federal government had never had an impact on a community the state average reflects a "best guess" as to the situation the district would likely have been in. On the other hand, a higher cut-off point can be justified if it is assumed that the private activity that would have taken place in the absence of federal impact would have given rise to a higher tax base. Another point in favor of a higher cut-off is that the federal employees, had they not moved to the particular district in which they are found, might have moved to some other district that would have higher than state average asessed value per pupil. In the case of highly skilled civilian employees (e.g., scientistis and engineers) this argument is probably true.

Considering all of these factors, Battelle has used a cut-off point of 1.25 times state assessed value per pupil in its recommended program. No attempt, however, is made to justify this cut-off in preference at 1.24 or 1.26.

State averages rather than national averages are used to determine the cut-off point because national average tax base figures cannot be constructed on a reasonable basis for reasons explained in an appendix to this report. It would be possible, however, to permit more recognition of differing wealth per pupil in various states by letting the cut-off point vary in proportion to differences between per capita personal income in the various states. For example, if the per capita personal income of one state were 10 percent below the national average, the cut-off point for that state could be made 110 percent of 1.25 (or whatever number is chosen for the cut-off point).

ELIGIBILITY, ABSORPTION, AND CORRECTIONS FOR THE INHERENT OVERCOUNTING OF STUDENTS

Problems With Current Law

Unless it happens to have 400 federally connected pupils (a provision helpful only to large school districts) a district cannot be eligible for P.L. 874 unless at least 3 percent of its students are federally connected. Assuming equal sized districts (ADA = 10,000) and a local contribution rate of $600 (half that for (b) pupils), the following situations are quite possible under existing law.

TABLE 7.1. PAYMENTS TO NEARLY COMPARABLE DISTRICTS UNDER P.L. 874

		District B	
	District A	With Eligibility Last Year	Without Eligibility Last Year
Total ADA	10,000	10,000	10,000
Federal Students (All 3 (b)	300	299	299
Local Contribution Rate, if Eligible	$600	$600	$600
Entitlement, if Eligible	$90,000	$89,700	$89,700
Entitlement, Current Law	$90,000	$89,700(a)	None

(a) If not eligible last year but eligible the year before, the payment would be half the amount shown.

Because of the entitlement threshold, the value to District B of an additional federal pupil would be the full amount of the payment for all 300 pupils or $90,000 in presumed burden for a single pupil. The presumed burden of a district having 300 pupils last year and 299 this year is $89,700 while the presumed burden of a district having 298 pupils last year and 299 this year is zero.

This anomaly is inherent in any approach to P. L. 874 in which an eligibility threshhold is established, but where payments are made on all pupils once eligibility is established.

A second important problem concerns the relative importance accorded to different types of pupils. Under the current legislation the payments for the 3 (b) pupils are only half as large as those for the 3 (a) pupils, reflecting the notion that the burden imposed by the 3 (a) pupils is twice as great as that imposed by the 3 (b) pupils. However, the current eligibility calculations assume that the impact of each type of pupil is identical. A more proper approach to eligibility is to use the same relationships among different types of pupils as is used to calculate the payment rate, thereby making the eligibility concepts consistent with the payment concepts.

The following pages discuss eligibility and absorption* in light of these two problems with current law and in light of the inherent tendency of the student counts to overestimate federal impact for the reasons discussed in detail in earlier chapters.

No Minimum Requirement

If each federal student is presumed to give rise to some type of burden, it can be argued that there should be no minimum impact to qualify for assistance under this program.

Allowing eligibility for all districts having any federal pupils would bring practically all of the roughly 20,000 local educational agencies in the United States within the scope of the impact aid program. It is reasonable to anticipate that this change would significantly increase the administrative costs of the legislation, and that the ratio of administrative costs to program dollars would be much higher for the districts thus brought into the program than for those already in the program. At the extreme the program would cover a payment of $150.00 based upon a single 3 (b) child in a district using one half national average per pupil costs to calculate its local contribution rate. A very conservative estimate of the cost of servicing one district for P. L. 874 alone would suggest a minimum processing cost in excess of $2,000.* Such costs are not unreasonable for a program, like the current P. L. 874, where the average payment exceeds $100,000 per district; but would be unreasonable when they begin to exceed the value of the payment.

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*Absorption refers to limiting federal responsibility to a number of federally connected students that is less than the total federally connected students in an applicant district.

It is certainly also true that the inequity of the federal government's imposition of a burden on a district is none too compelling when that burden represents a small percentage of the district's budget and where there is reason to believe that the student count method overstates that burden by some unknown, but significant, amount.

Finally, payments to districts with a very small percentage of federally connected students simply represent a "wash" (or cancelling) transaction between the taxpayers in the district and the federal budget that achieves no useful purpose and consumes administrative effort that could better be expended for other causes. The added federal budget outlays to bring all districts in the United States into the impact aid program would be raised in large part from the districts in the United States that do not now participate in the program and would tend to be paid back into the same districts through a distribution of funds not too different from the distribution of the taxes used to pay for the program's extention.

This reasoning indicates strongly that there should be some cutoff below which payments will not be made; but the reasoning does not lead to a precise definition of where that cutoff should be made.

An Administratively Justified Eligibility Threshold

One approach to this problem is to set the threshold for eligibility in such a way as to seek to solve the problems of high administrative costs in relationship to program dollars. This approach, and only this approach, justifies the use of eligibility standards without comparable absorption.** This approach would presume the equity of paying for all federally connected students but justify not paying certain districts mainly on the basis of high administrative costs.

Such an administrative threshold could be justified in terms of a minimum dollar amount of payment (or a minimum number of pupils which, roughly speaking, produces the same effect) or in terms of a minimum percentage of students required for eligibility. Because small school districts with a higher percentage impact can claim that a minimum number is unfair to them and larger districts with a small percentage impact can claim that a percentage is unfair to them, one approach (the current one) is to combine both a minimum number of students and a percentage and to allow some stipulated minimum number (currently 400) to indicate eligibility regardless of the percentage of students. If one is to take the approach of basing eligibility upon a reasonable administrative cutoff, the current eligibility criteria are a reasonable approach.

A Budget-Justified Absorption

Throughout the history of the P. L. 874 program absorption has always appeared as an attractive approach to many observers. The basic concept of absorption is that a school district should be asked to support from its local resources a certain percentage of its pupils even though they may be federally connected. For example, in a district with total ADA of 100 and 10 federally connected students, absorption of 3 percent of ADA would mean that the federal government would defray the costs of seven of the students and the district would be asked to defray (would not be reimbursed for) the costs of three of the students (see Table 7.2).

Absorption has strikingly different impacts among different districts, depending upon the extent of the federal impact upon the district. Also because it reduces entitlements among all districts receiving assistance its budget impact can be quite pronounced. The following table provides some indication of the impact of absorption on district with different degrees of federal impact. The presumed absorption is the same rate as that used to determine eligibility (3 percent) and, for simplicity, all the students involved are assumed to be 3 (a) students.

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*Real administrative costs (not all of which are reflected in the federal budget) include developing, distributing, filling out and tabulating student survey forms, preparing applications, keeping books on the payments, state review of applications, federal review of applications, making of payments, auditing and reporting.

**It is just as hard to administer a payment of $500 to a district that could claim $200,000 without $199,500 of absorption as it is to administer a payment of $200,000 to the same district. The student counts, application processing, and auditing problems are identical.

TABLE 7.2. IMPACT OF ABSORPTION ON 3 PERCENT OF ADA UPON REPRESENTATIVE DISTRICTS

Percent of Federal Students	Total ADA	Federal ADA	Absorbed ADA	Eligible Students	Percent of Federally Connected Students Resulting in Impact Aid
3	100	3	3	0	0
4	100	4	3	1	25
6	100	6	3	3	50
9	100	9	3	6	67
12	100	12	3	9	75
30	100	30	3	27	90
100	100	100		97	97

Source: Battelle calculations.

As the table indicates, the lower the percentage of federal students in a district, the higher percentage an absorption concept makes a local responsibility. When it is recalled that the average federal impact over all P. L. 874 recipient districts is relatively low, the financial impact of absorption can be seen to be substantial.

Another aspect of absorption is that its burden tends to fall upon the districts least dependent upon impact aid funds. Because impact aid payments expressed as a percentage of total school budget tends to correlate with percentage of students that are federally connected, the largest impact aid reductions resulting from absorption occur in the districts with the smallest reliance upon impact aid. Whether this makes absorption desirable or not is obviously debatable. The primary impact of absorption is (a) to eliminate the districts that claim on the basis of meeting the 400 student minimum without having a percentage of students exceeding the eligibility threshold and (b) to cut very sharply entitlements in districts with a low percentage of federal students. These impacts fall particularly upon the nation's larger cities.

The primary difficulty with absorption developed merely to reduce total budget outlays for impact aid is that it has no particular rationale in terms of the objectives of an impact aid program. Because of this lack of rationale, one cannot say whether one absorption percentage is better than another except in terms of determinations of what should be spent upon impact aid. For that reason, Battelle has not pursued budget-constraint determined absorption concepts further in its analysis of impact aid, as the Battelle study was not aimed toward producing any particular federal budget impact.

Absorption and Eligibility Based Upon Exceeding National Averages

As noted earlier, there is very little logical basis for defining a particular cut-off point for eligibility, once one eliminates the case where the program would cost more to administer than the assistance it would provide. One logical stopping point would be to determine that the federal government should provide impact aid only to those districts that have more federal impact than the average district in the United States.

There are several approaches that produce the conclusion that only districts with above average impact should be paid. The first of these consists simply in pointing out that a truly average district in the United States would pay an average amount of federal income taxes (and indirectly corporate taxes) and have an average percentage of federally connected pupils. To impose a program of impact aid upon such districts alone would simply be to collect funds from the taxpayers of the district and return the same funds to the district for the use of its school system, minus, of course, the costs of administering the federal tax and grant program used to make these transfers. Although such a program might have an advantage in reducing reliance upon the property tax and increasing school financing through an income tax, a similar result could be reached more readily by distributing some percentage of the federal income tax on an ADA basis. By definition if a district has average federal impact, expressed as a percentage of total ADA, it will do as well under a distribution based upon ADA as it would under a distribution based upon counting federally connected children.*

The same approach can be taken toward the question of absorption. Assuming for the moment that the nation is composed only of two sets of school districts, one with slightly higher than average federal impact and one with slightly lower than average federal impact, we can illustrate the problems inherent in the current notions of amount of payment.

Table 7.3 illustrates in an exaggerated but fundamentally correct form the difficulty with having no absorption within an impact aid program that has an eligibility threshold. The districts that fail to meet the basic eligibility criteria have to bear the cost of their federally connected pupils and share the costs of all federal pupils in the districts that happen to meet the basic eligibility criteria.

TABLE 7.3. IMPACT OF P.L. 874

	Group One Impacted Districts	Group Two Ineligible Districts	National Total
Total ADA	20,300,000	20,300,000	40,600,000
3 (a) ADA	200,000	148,700	348,700
3 (b) ADA	1,772,400	450,000	2,222,400
Percent Federal(a)	9.7%	2.9%	6.3%
Eligible for P.L. 874	Yes	No	--
Local contribution rate	$317.10	N/A	--
P.L. 874 entitlement	$344 million	None	$344 million
Group's Share of Federal Taxes to Support Activity	$172 million	$172 million	$244 million
Group's Net Gain or Loss	+$172 million	-$172 million	0
Net Payment per Federal Pupil	$86.00	0	

(a) Counting (b) students and (a) without weighting.
Source: Designed by Battelle.

The solution to this problem is to make the absorption and eligibility criteria equal. In the example, both the eligibility percentage and the absorption percentage could be made zero. In such a case the total costs of the program would rise from $344 million to $464 million, by an increase of $120 million in payments to the second group.** This would raise the tax burden of both groups, making the net gain of the first group $112 million and the net loss of the second group $112 million rather than the $172 million shown in the original example. Having no eligibility requirement would make the payment for each federal pupil the same in both sets of districts.

Another approach that would achieve roughly the same result would be to have all eligible districts absorb the same percentage as the eligible threshold, in this case 3 percent of ADA. This would reduce the total payments and thus, reduce the transfers from the taxpayers in Group two to the students and/or taxpayers in Group one.

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*This assumes an identity of interests between the taxpayers and the district, an indifference between local property and Federal income taxes, and that the distribution of federal tax burdens among districts is comparable to the distribution of pupils.

**Derived by paying the average local contribution rate for the 148,700 (a) pupils and half that rate for the (b) pupils.

101

The moral of this discussion (admittedly shown by example rather than rigorous proof – although a mathematical proof could be developed) is that when one is dealing with districts near the national average federal impact, it makes little difference whether one raises federal taxes in order to support every federally connected pupil regardless of the number of pupils in a district, or whether one asks all districts to absorb some federally connected pupils. The situation in which the eligible group takes the greatest advantage of the ineligible group is when there is no absorption, but there is a limit on eligibility.

The preceding discussion simply brings out a conclusion that should be observable on a common sense basis to anyone familiar with the current P. L. 874 program. The taxpayers in the districts ineligible for P. L. 874 provide tax funds for use in the eligible districts (as everyone knows) in order to reduce tax burdens, or increase educational programs, or both, in the eligible districts. As long as no federally connected pupils in the ineligible districts and all federally connected pupils in the eligible districts are used in calculating payments, the ineligible districts suffer an undue burden from the P. L. 874 program. This burden, to the extent that it is unjustified, can be eliminated by (1) requiring the eligible districts to absorb the same percentage of federally connected children as the ineligible districts do and using the federal budget savings to (a) reduce taxes or increase them less, (b) fund any other federal education program, (c) fund any other federal program of general benefit, or some combination of the three. Alternatively, the burden could be eliminated, to the extent it is unjustified by federal impact, by making payments on the basis of all eligible students, thereby increasing taxes on the taxpayers in the eligible districts without increasing their payments, while initiating payments in the ineligible districts that would be greater than the added tax burden in those districts.

The above conclusion contains two presumptions that need specific examination. The first of these is that the taxpayers in a school district and the school district are essentially identical. Implicitly it has been assumed that if the taxpayers in the ineligible districts have their taxes increased, the district as a whole is worse off. Thus there is an implicit presumption that if federal taxes are reduced by a given amount on the individuals in a school district, they can apply that amount to support of the schools through local taxes. Also, it may be easier (or harder) to raise funds for education through local taxes than federal taxes. If one believes that it is easier to raise funds for education through federal than local taxes, and that more funds should be raised for education, the above logic holds only if the funds saved through absorption would be devoted to some other federal educational program.

The second presumption is that the tax contributions of various districts (actually taxpayers in the districts) correlate relatively well with total ADA, but not with federally connected pupils. If impacted districts as a whole got by with lesser or greater than average federal income and other federal tax burdens, some of the mathematics in the example would be changed.

To conclude this discussion, a very attractive argument can be made that one reasonable approach to eligibility and absorption is to make payments only to those districts and only on such pupils that exceed the national average of federally connected children.

Absorption Based Upon Economic Logic

The preceding subsection has sought to indicate some severe inequities inherent in having an eligibility threshold without absorption of the same percentage (of something) by the eligible school districts. Further, preceding sections have indicated the desirability of having some eligibility threshold in order to avoid a program that might for some districts have higher administrative costs than payments. These considerations lead to the conclusion that there should be both an eligibility criteria and some absorption within any impact aid program. The notion of using a national average impact as what ought to be absorbed has been discussed in this connection, without a clear specification of a national average of what. To develop this specification requires returning to the economic logic of the net burden of federal installations.

Some absorption concepts that have been discussed in the context of P. L. 874 debates have tried to require districts to absorb some percentage of total ADA, just as the current eligibility formula requires absorption in the ineligible districts of 3 percent of ADA. Critics of this approach have indicated that this concept carried to extremes leads to economic nonsense. The extreme case is a district composed entirely of 3 (a) pupils; in which case absorption of 3 percent (or any percent) of ADA says that the district should absorb federal pupils based upon the federal pupils it has. If 3 (a) pupils really bring no tax base to the district, a 3 percent absorption applied to such a district with a local contribution rate approximating (in combination with available state aid) state average per pupil costs simply says that such a district should for some reason have less than state average per pupil costs. The logic of net burden does not lead to this conclusion.

To avoid this problem, absorption can appropriately be based on the number of non-federal pupils in the district. Thus a district could be asked to absorb the same percentage of its non-federal students as the nationwide total of non-federal students.

Absorption Related To Overcounting Of Students

In considering eligibility and absorption, it is essential to recall that the combination of the student count methods and the per pupil payment calculation concepts recommended in earlier chapters would, like the present P. L. 874 program, tend to overcompensate eligible districts by a large (but unknown and unknowable) amount. First, the student counts include students on the basis of one parent working on federal property, even though the primary wage earner may be working on private property. Second, the student count procedure would continue to allow flexibility in the choice of the date on which students are counted and thus allows an applicant to pick a count date with the maximum number of seasonal or temporary workers are working on federal property.

Besides these factors, the student count procedures and per pupil payment will tend to pay much more than is indicated by either one of the economic impact concepts discussed earlier in this chapter. If the impact of federal activities is considered through the service burden concept, the following sources of overcounting develop:

(1) The student counts are asymmetrical, they assume that when a family moves to a district to accept federal employment a burden is created for the receiving district, but do not recognize that if a burden occurs in the district to which the family moved, a benefit must have been created in the district from which they moved.

(2) The student counts include, particularly as (b) pupils, a significant (but unknown and unknowable) number of children who would be attending school in the district whether the parents were employed by the federal government or not.

If, on the other hand, one accepts the tax loss concept of burden, the following sources of overcounting develop:

(1) The student counts include students in districts that suffer no tax loss because the federal property on which the parent works is outside of the school district in which he lives. In this circumstance the district would collect no tax revenues from the federal property even if it were taxable, and thus is not burdened by the fact that it is not.

(2) The payments developed by counting students and multiplying the total by a per pupil contribution rate will often exceed the tax revenues that would have been paid on federal property if the district had been able to tax it.

(3) If the tax loss is presumed to arise because if an employee did not work on federal property he would be working on private property, the tax loss tends to be overstated by the probability that if an employee did not work on federal property he would be working on non-federal non-taxable properties of state and local governments, churches, and other tax exempt organizations.

Under either the tax loss or the service burden concepts, the combination of the student count and per pupil contribution rate will fail to reflect those circumstance where the indirect economic stimulus of federal activities raises tax base (and thus revenues) by more than the amount required to educate the students associated with that indirect economic stimulus. The recommended "richness cut-off" deals with only a part of this problem.

While it is impossible to estimate the magnitude of these tendencies of both the recommended formula and the present formula to overpay districts, it is possible to suggest a key characteristic of the tendency toward overpayments. That is that the overpayment errors are more likely to arise in districts with minor federal impact than in districts with heavy federal impact, and more likely to arise in connection with (b) pupils than with (a) pupils. This is particularly the case under the service burden concept for the following reasons:

(1) An (a) pupil represents a federal employee for whom the government is providing quarters (and some Indian pupils), usually military personnel living on base. These pupils are thus normally in the district because the federal government assigned the parents to a particular installation and would not be likely to be in that district unless the federal government makes this assignment decision.

(2) Excluding Indian districts, the heavily impacted districts are most likely to be districts adjacent to or encompassing military installations, in which case the same situation prevails as is outlined in (1) above.

Given this situation it becomes apparent that some correction for overcounting of students is required and that the corrections should be greater in lightly impacted districts than in heavily impacted ones. Thus, the absorption principle which has much to commend itself before overcounting of students is considered also happens to provide a convenient method for correction of overcounting errors. Although this approach does not indicate specifically what absorption percentage (based on non-federally connected pupils only) should be used, the approach does commend absorption because of its effect of making only minor downward adjustments in heavily impacted districts but major adjustments in lightly impacted districts.

The concept of paying districts only for those federal students that represent above average federal impact has certain conceptual advantages in addition to the other advantages discussed earlier in this chapter. In effect, this concept indicates that the federal government's responsibility extends only to those districts that have an above average federal impact and for districts that have such an impact, the federal responsibility covers only the costs of educating the students above that average. On an overall national basis, the concept of paying only for above average impact would indicate that a district would be asked to absorb federal students reflecting 3 percent of its non federal enrollment.*

This recommendation would mean that a district applying for impact aid would count the total number of (a) students, add the number of (b) students multiplied by 0.4, subtract 3 percent of non-federal students (total students minus the equivalent federal students) and receive payment of the full per pupil

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*On an overall national basis, the student count situation is approximately as follows:

3 (a) students	348,703 × 1	348,703	
3 (b) students	2,222,358 × 0.4	888,923	
Total federally connected		1,237,626	
Total students (approximate)		41,377,000	
Percent equivalent federal of non-federal	=	$\frac{1,237,626}{40,139,374}$	= 3.08
Percent equivalent federal of total			= 2.99

The estimates of federally connected children used above are taken from Office of Education records reported in the fiscal 1968 annual report on P. L. 815 and P. L. 874. These estimates include some federally connected children that would be excluded under the Battelle proposals, but exclude children residing in districts that do not claim P. L. 874 entitlements. The total ADA is from NEA's Rankings of the States, with the District of Columbia added on an approximate basis. Given these estimates, it seems reasonable to peg at 3 percent the implementation of Battelle's approach of paying only for above average federal impact.

payment rate times the number of students remaining.* While it is inappropriate to view the financial effects of this recommendation independent of the other recommendations, it should be noted that the recommendation alone has major implications for the number and type of districts receiving assistance. By using the same weighting of (b) pupils for elegibility as for payment, the recommendation would have reduced the number of eligible districts from by over one thousand if applied in 1967-68 (even if the (b) pupils were assumed to be a 50 percent federal responsibility) but would have reduced entitlements by less than $100 million. In the remaining eligible districts absorption of 3 percent would sharply reduce entitlements in those districts that just barely reached the eligibility threshold, but not at all in those districts that educate only (a) pupils, but no (b) or non-federal pupils.

POSTAL EMPLOYEES

The question of postal employee inclusion in impact aid becomes less significant if it is decided that absorption and eligibility ought to be based upon national average impact. Without absorption, including postal employees is merely a way to raise total entitlements and thus federal aid to education. Once the notion of absorbing the national average of federally connected children (and thus focusing the program upon heavily impacted districts to a much greater degree than at present) is accepted, whether postal workers are included is of less consequence.

Including those postal workers that are distributed close to consistency with population and pupil distributions (e.g., the local mail carrier) would simultaneously inflate (1) the number of federally connected students to be counted in most districts and (2) the number of federally connected students that would have to be absorbed by approximately the same districts. Thus, including postal workers performing local services such as actually delivering the mails would be of no particular benefit or loss to most districts. Because including postal workers would simultaneously increase the number of students to be counted and would change the percentage that would have to be absorbed (through changing the national average federal impact), it would give with one hand and take away with the other.

A different situation exists for those postal employees that cannot realistically be expected to be distributed in proportion to school age children throughout the United States. A strong case can be made that the postal employees associated with such centralized functions as regional mail processing are concentrated in certain school districts, particularly districts serving large cities such as New York, Chicago, and Los Angeles. However, the situation in these cities, and others like them, is one of less than average federal impact. For that reason a program concentrated upon districts with greater than average impact would not provide assistance to these cities even if postal workers were counted. Again the question of the postal workers becomes relatively moot except in a few cases where heavy federal impact and large postal processing responsibilities may coincide.

SUMMARY AND CONCLUSIONS

This chapter continued the development of a recommended formula for impact aid by suggesting that the appropriate federal responsibility for (b) pupils is measured by 40 percent of the per pupil contribution of the (a) pupils. It suggested that districts that have a high assessed value per pupil should not receive impact aid because either (1) the relative wealth may well have been an indirect result of the federal impact or (2) the district's ability to support a reasonable standard of education from local sources is already high. The chapter developed the concept of paying only for above average impact in any district as a conceptually reasonable approach to impact aid and as a way to correct for the over counting inherent in the student counts.

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*If one wanted to retain payments for all (a) pupils, the payments could be made on the greater of this number of pupils and the number of (a) pupils.

CHAPTER 8: SOME SPECIAL ISSUES

The purpose of this chapter is to provide detailed consideration of several special issues that are important in the context of impact aid but which are somewhat peripheral to the development of the basic formula for the distribution of impact aid funds. These issues include (1) the treatment of capital costs, (2) the interaction of impact aid and state aid programs, (3) the treatment of Indian education in the program, (4) administrative questions, and (5) earmarking of impact aid funds.

CAPITAL CONTRIBUTIONS

Problems With P. L. 815

In the long run the approach embodied in Public Law 815 to providing school facilities for federally connected children will prove untenable. Signs of the problems are already beginning to appear. The basic problem with P. L. 815 stems from its dissimilarity with P. L. 874. The strongest features of P. L. 874 and those most appreciated by the recipients of the assistance are

(1) Low administrative cost and little red tape

(2) A simple process for determining how much assistance is to be provided

(3) Discretion of the recipient to apply the funds where, in his judgment, they will do the most educational good, resulting in

  (a) No need for project-by-project applications

  (b) Little opportunity for federal control

  (c) No special accounting and reporting requirements

(4) An on-going level of support that, over time, is intended to ensure that the federal government pays "its share" of educational costs as determined through a formula.

P. L. 815 lacks all of these features. By comparison to P. L. 874 it is quite expensive to apply for and administer. As a practical matter the assistance to be provided is determined through a relatively complicated set of criteria and, because capital projects are easily deferrable in the federal budget, P. L. 815 provides for uncertain levels of support based upon a priority system that tends to penalize a district that proceeds on its own to provide classrooms for federally connected students. P. L. 815 requires a project-by-project application and gives the superintendents considerably less discretion in the use of funds than P. L. 874.

While these difficulties are serious, another factor indicates that P. L. 815 cannot ever be a permanent solution to the problems of meeting federal impact. Basically, P. L. 815 deals only with increases in federally connected students and the costs that they cause. As the years go by many districts that have a large portion of their enrollment stemming from federal children will find that the federal government's participation in initial school construction cannot be followed by similar participation in replacement construction, and there will be no increase in federally connected enrollment upon which to base additional P. L. 815 assistance. In an extreme case of a district that had stable and 100 percent federal enrollment, as the schools initially built with P. L. 815 became obsolete and physically unsound, the federal government will have no way to participate in the costs of replacing them.

Solving the P. L. 815 Problems

In reviewing the concepts of P. L. 815 and P. L. 874, Battelle early in its research came to the conclusion that the concepts of the two laws were not consistent. This indicated either that P. L. 874 should be placed upon a basis more like P. L. 815 or the reverse. Because of the many desirable features in the semi-automatic way in which P. L. 874 operates to cover the costs of federally connected children, the task of developing a program to handle capital costs became one of finding a way to adopt the advantages of P. L. 874 concepts into the capital costs programs now covered by P. L. 815. Conceptually, this process is quite simple, as outlined below.

The Contract Payment District

Under both Section 6 (federally managed schools) and Section 3 (c) (4) of the present law, districts receive an operating cost (P. L. 874) payment that is basically a negotiated rate which, conceptually, works backward from a reasonable standard of education to the federal payment by subtracting the state and local resources available and making the federal payment the residual. These negotiated rates are available at the present time only to districts which have 3 (a) students that are 50 percent or more of total average daily attendance. Under Battelle's recommended program any district with federal-equivalent students (counting the (b) students at 40 percent of an (a) student) would receive their funds under this provision. We believe that the appropriate method to deal with the capital investment problems of these districts is to place federal-capital payments on the same basis as the operating costs payments. This would mean that the districts concerned (less than 200) would be in the position of presenting both annual operating and capital budgets to the Office of Education and providing information on state and local resources available for application to both categories of cost.

Other Recipient Districts

The basic payment rate formula recommended by Battelle takes the district's own tax rate and applies it to the state average tax base per pupil to determine the basic payment rate per pupil. This approach is as valid for capital costs as for operating costs, and combining the two types of cost into the same formula removes the administrative costs inherent in trying to decide in borderline cases what is a capital cost and what is an operating cost.

For example, if a district had a tax rate for school operating purposes of 20 mills, and a capital rate of 3 mills (for sinking fund, principal and interest on bonds, building funds or even rent) and the state average assessed value per pupil were $20,000 the local contribution (federal payment per eligible pupil) would be $400 for operating costs and $60 for capital costs. While separate accounting of the two types of costs would be continued, little administrative effort need be expended in keeping the costs separate as erroneous attribution of a cost (e.g., a major repair) to the wrong category would neither increase nor decrease the federal payment. Thus the federal government can be indifferent to whatever procedures are in effect in each state for distinguishing capital from operating costs.

The federal capital contributions to each district would be paid on a current basis – on the same time framework as the operating cost payment. The only restriction on the use of the capital funds would be that they be used for capital costs rather than operating costs.* The administrative action to enforce this provision would be simple in the extreme – the district would merely have to maintain auditable records indicating that the capital cost funds from the federal government were (a) still being held in anticipation of future capital investments or (b) had, in fact, been expended for capital outlay purposes. Capital outlay purposes would be defined as the payment of rents, the acquisition of sites, the purchase of equipment, the retirement of bonds, the payment of principal and interest on bonds, and the setting aside of funds in sinking funds designed to retire bonds.

This approach to capital contributions would have the same advantage that a similar approach has to operating contributions, it ties the federal payments to the efforts of the individual district. In the case of a district that received all of its building funds from the state, or a district that did not make a substantial local effort to provide buildings (e.g., a district that was not experiencing growing enrollment and had already financed its buildings through building funds and P. L. 815) the federal government would make a similarly low effort. On the other hand, a district that was undertaking a major building program would find that its significant local effort would be matched by the federal government.

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*An appropriate way of handling differing capital outlay procedures in various states would be for the impact aid law to require simply that these funds be used in the recipient district in accordance with state law.

Under such a program the local communities would never be in a position to abuse the privilege of collecting federal funds. Because all districts with more than 50 percent of their average daily attendance in federally connected children would be in the contract payment category described above, no district would be collecting funds under this section from the federal government that would exceed the funds that had to be provided locally. In the example cited above to trigger a payment of $60 per child from the federal government, the district would have had to have levied the 3 mill tax upon its own taxpayers. This puts the local district's governing bodies and its taxpayers in the position of, in effect, guarding the federal treasury against unnecessary expenditures and at the same time triggering federal expenditures to the degree that they themselves perceive educational needs to be great enough to trigger local expenditures.

Such a program also puts the initiative back in the place it belongs – the individual school district. Under P. L. 815 a district which applies for federal funds is confronted with a substantial waiting period even when P. L. 815 is fully funded and a longer, almost indefinite, period of waiting when that legislation is not fully funded. The result in some districts has been actually to delay provision of capital investments to service both federal and non-federal children. Under Battelle's proposed treatment of capital outlay, a district may initiate building program actions at any time it chooses, secure in the knowledge that the federal government will carry its share of capital load – in fact, the same percentage of the capital costs in the districts as it bears of the operating costs in the district.

For the majority of school districts that would receive impact aid funds under the program recommended by Battelle, this capital program would operate simply and quite consistently with the financial planning and regulations under which the districts operate. Potential problems would be likely to arise only in two special cases. The first of these is the rare circumstance where (1) a district has based its school facility financing upon borrowing, (2) the state provides for a limitation on bonded indebtedness, and (3) that limit has been reached with added facilities still being required to provide a reasonable standard of education.

The second problem could arise (just as it can arise in the operating cost area) when a district finds that its local taxpayers would prefer to wait for funding of adequate facilities primarily for the use of federal students until the federal government is willing to provide the costs of those facilities. These cases are, in our opinion, likely to be relatively rare, but provision can be made to handle them.

In both cases, the solution mechanism is to provide for limited prepayments of the capital contribution rates to districts experiencing these situations. These prepayments would be made by the Commissioner of Education upon finding that one of these two special circumstances existed. The prepayment would be paid back to the federal government through reducing the subsequent capital contributions to that district out of its entitlements for capital costs in subsequent years.* An example can best indicate how this system would operate in these cases.

A district with 1,000 eligible federal pupils is assumed to be receiving annual federal capital contributions at about $30 per federal pupil per year, based upon the district's local effort in servicing outstanding bonds. If the district simultaneously wished to construct a new high school (that would exhaust its legal limits on bonded indebtedness) and construct an elementary school addition for an expected influx of 500 new federally connected students, it could do so in the following manner.

First, it could float bonds for the construction of the high school, perhaps raising its bond service requirements by an amount making the bond rate triple the present rate. This action alone would cause the federal per pupil capital payment to be increased to $90 per pupil. Without the assumed influx of new federal pupils, this increase would mean simply that the federal government was continuing to share the costs (both operating and capital) of the school system as it had before, but that the federal contribution increased automatically as the costs increased. In effect, a high school is being built to serve the needs of both federal and non-federal students and federal and local taxpayers are bearing the costs of that construction in the same proportion as they bear the operating costs of the school.

With the need for the elementary school, the district would be permitted to come to the federal government and ask for prefunding of the capital contributions of the federal government, in order to finance the construction of an elementary school addition costing, say $500,000. The federal government would advance these funds to the district, but instead of paying the district a capital contribution rate of $90 times 1,500 pupils ($135,000 annually), the government would keep an amount required to pay back the federal advance within a reasonable period (to be negotiated at the time the advance is made). For example, ignoring interest for the moment, the district might receive its capital contribution rate for the next five years in two forms: $35,000 in actual payments and $100,000 in the form of reduction in the obligation to repay the federal advance. This would mean, in substance, that during that period the local taxpayers would be bearing the full costs of the high school and the federal government the full costs of the elementary school. At the end of a 5-year period, the federal government would have saved $500,000 by making lower annual capital payments to match the $500,000 it advanced and the capital contributions could revert to their normal levels.

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*In the very special case of a district that did not raise significant funds locally for capital costs, it would be possible to reclaim the funds from deductions from the operating cost payment as well.

To discourage any potential abuse of this system, it is desirable that the obligations of the local district reflect the fact that the federal government does incur interest costs, and that, therefore, the local district should be responsible for the interest on the outstanding advances calculated on a basis to reflect the costs of borrowing to the federal treasury.* Because the school district bonds are exempt from federal income taxes on interest paid, they will normally be available at a lower rate of interest than the federal advances. Thus, the district will find it preferable to float its own bonds rather than seek advances when it is legally permissible under state law to do so.

Under both P. L. 815 and the proposed new program, the federal government bears the risk of sharp phase down of major military installations. This follows automatically in the case of P. L. 815 because any construction on that program is a grant. In the case of the prepayments under the proposed new program, the federal government would be able to get its money back only through deductions from continuing impact aid payments to the district. In the case of an installation phasing out entirely this would mean that the federal government would have no way of retrieving its advances. The federal assumption of this risk appears reasonable, particularly as any other policy might serve to discourage the construction of schools to serve federal pupils.

As a practical matter the sums involved in this risk are relatively minor because total phaseouts of major military installations are relatively rare, and most school systems would not be using the repayable advance feature of the program. A more frequent case could be the reduction in manning levels of a particular installation. In such a case there will still be payments to the district and thus the opportunity to recover federal costs through deductions from the capital contribution rate.

Avoiding Double Payments

As a practical matter, because of massive expenditures of P. L. 815 funds in the 1950's, special construction provisions of earlier legislation and a variety of other federal financing for school construction, the federal government may already have met its obligations for school construction in many of the districts that have a substantial number of federal pupils. In general, we believe that the federal obligation to finance capital facilities should not extend beyond the proportion of facilities required to house the federal students in a district.

It follows that where the federal government has, for example, already funded through one program or another, 40 percent of the classrooms in a school district, but federal eligible pupils constitute only 30 percent of the total enrollment in the district, the federal government should not be obligated to participate in any of the payments on bonds issued in the past to pay for those schools that were not financed by the federal government.

A variety of approaches could be taken to implement this approach to the obligation of the federal government to a district that already has had considerable assistance from the government in the construction of school buildings. In general, the more these methods seek to give precise outputs about federal obligation the more administratively burdensome they become. Recognizing this fact, we have adopted a relatively simple formula for taking past federal contributions into account. The elements of this formula are:

(1) Where the federal government has never participated in providing buildings in the school district, the federal government shares in capital costs in the same manner as it does in operating costs - this is the basic formula advocated by this section.

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*The Treasury Department makes annual calculations of this interest rate for use in a variety of federal programs. The best formula seems to involve the use of the yield in the preceding year of outstanding long-term federal obligations.

(2) Where the federal government has provided a greater proportion of the total classrooms in the district than the proportion of eligible federal pupils (counting the (b) students at 40 percent) is of all pupils, then the federal government will make its contribution based only upon that portion of local capital levies used to finance capital outlays initiated after the enactment of the new formula. This would mean that in a district where the federal government had already financed more than its share of construction, the capital contribution rate would initially be zero, but would slowly begin to build as the district began to incur new capital obligations.

(3) Where the federal government had provided funds for the construction of some school facilities, but less than the federal share as determined above, the federal government would share in the costs of past capital outlays in proportion to the unmet obligation of the federal government and would share in new capital outlays under the basic formula.

Obviously regulations would have to be issued by the Office of Education to define the ground rules for the termination of what classrooms would be counted to determine the past federal contributions.

The operation of the third of these provisions can easily be shown by example. Suppose that the federal government had financed 20 percent of the classrooms in a district, but that federal students accounted for only 30 percent of the school district's average daily attendance. This would indicate that past capital outlays had been financed as follows:

Amount that should have been federally financed: 30 percent
Amount that was federally financed: 20 percent
Amount that was not federally financed: 10 percent
Amount that should have been locally financed: 70 percent.

In this situation the federal government should assume responsibility for 30 percent of any new capital obligations incurred by the district. However, to pay 30 percent of the debt service on old obligations would overpay the district, but to pay nothing would underpay it. The solution is for the federal government to pay a fraction of district past capital costs by paying a fraction of those costs equal to:

$$\frac{\text{Percent that should have been federally funded but wasn't}}{\text{Percent that was locally financed}} = \frac{10 \text{ percent}}{= 80 \text{ percent}}$$

Thus the federal government should pay one-eighth of all past capital outlays still covered by current costs and 30 percent of all new capital outlays under the regular impact aid formula.

Reverting to an earlier example, if the district had a three-mill tax level at the present time for the prepayment of debt incurred to build existing schools, the capital contribution rate would be the three-mill tax, times the state average tax base per pupil times one-eighth. The contribution rate for a new levy of one mill for further construction would be the one-mill tax times the state average tax base per pupil. Thus the total federal contribution would simply be these rates times the number of eligible federal pupils in the district.

As the years go by, the districts will have retired their debt based upon earlier bond issues (and may have phased out some of the federally constructed classrooms) with the result that the federal government will be making payments under the basic formula only.

Costs of the Approach

In considering the costs of this approach to capital outlays, it is important to determine to what the proposed program is being compared. In all probability the proposed capital contribution approach would be less expensive than the current P. L. 815 program in the near term (e.g., fiscal years 1971-75) assuming that all eligible districts were to be paid under P. L. 815. This difference arises primarily because the capital cost program would be tied to the proposed operating cost program which because of its more stringent eligibility and absorption provisions reduces the number of pupils upon which entitlements may be based. In the longer run, however, the costs of the current P. L. 815 program should drop sharply because the program would have met most of the costs of increased federal enrollment in most districts, and P. L. 815 makes no provision for dealing with replacement of facilities.

On the other hand, there can be little doubt but the capital outlay approach recommended in this report would cost considerably more than the roughly $15 million annually available in recent years for the funding of P. L. 815. Whether this comparison is relevant in terms of the burden of the federal government upon school districts is, however, doubtful as the current levels of funding of P. L. 815 fall far below the amounts necessary to meet the net burden of federal installations, no matter how restrictively that burden is calculated.

One reasonable approach to the capital outlay question is to say that, over time, the federal government's contributions to capital costs should bear about the same relationship to operating cost contributions as, on a national average, capital costs bear to operating costs. This would indicate, in fiscal 1971 for example, that the capital cost outlays for impact aid should be on the order of 10-15 percent of operating cost outlays. With payment of full operating cost entitlements under the present P. L. 874 (excluding public housing) likely to exceed $700 million in fiscal 1971, this would imply that a reasonable capital cost would be on the order of $70-105 million, assuming the validity of the present P. L. 874 program concepts.

The costs of Battelle's proposed program would be sensitive to a number of factors that present great estimating difficulties. The first of these is the extent to which the federal government has already met its capital cost obligations in many recipient districts. Although we have no national data upon which to base this estimate, there appears to be a high probability that the fiscal 1971 capital contribution rates would average a very low per pupil cost. The federal government under P. L. 815 has already provided housing for an estimated 1,900,000 pupils.* This compares to a total of some roughly 2,600,000 pupils claimed in eligible P. L. 874 applications in the same fiscal year (1968). Many of the eligible federal pupils for which P. L. 815 has not provided housing will be found in the nation's largest school districts – districts that generally would not be eligible for assistance under the program proposed in this report. Naturally, some of the housing provided by P. L. 815 is now located in places that may no longer be eligible for assistance, but the relative similarity of the pupils housed by the present program and total eligible pupils indicates that a higher percentage of facilities in heavily impacted districts have been constructed under P. L. 815. Inclusion of facilities constructed under other federal programs would indicate even smaller residual federal responsibility for previously constructed facilities.

STATE AID AND THE OFFSET OF IMPACT AID FUNDS

Background

Every state in the United States provides some form of state assistance for elementary and secondary education. In many cases these programs are quite specialized, providing, for example, for the special costs of transporting school children, for textbooks, for vocational education (with federal funds) and for similar fairly narrow purposes. In other cases states provide a flat per pupil grant to all of the districts in the state regardless of the program maintained or the local ability to finance school programs.

Practically all states have moved beyond these limited efforts into more comprehensive programs of state support. States that adopt these programs generally utilize formulas that seek to calculate two important variables: (1) the need for educational funds in each district and (2) the ability of the district to supply those funds through local taxes. Such programs have been adopted by the states largely in response to the sharp disparities that have developed between districts in the same state that have markedly different ability to support education through local taxes. These disparities are primarily caused by the fact that the property tax base per pupil tends to be quite high in some districts (for example, districts in which high-value industrial property is concentrated), but quite low in others.

The formulas used to calculate state aid differ substantially among the states, particularly in the methods used to calculate what constitutes a minimum level of "needs", the extent to which local resources are required to be offset against that need, and in the way in which local taxpaying ability is calculated.

Until very recently, impact aid legislation was silent on the issue of whether the states might take the impact aid payments into account in determining state aid payments to districts receiving impact aid.

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*U.S. Office of Education, Administration of Public Laws 81-874 and 81-815, Eighteenth Annual Report of the Commissioner of Education, p 171.

Some states responded to this situation by developing formulas for state aid that reduced state aid by an amount equal to all or some part of the federal impact aid payment.* The effect of such action was to reduce the funds that would otherwise be available to impacted districts and to reduce by a corresponding amount the costs of the state aid program. Many other states choose to take no action to take credit for the federal payments in their state aid distributions.

As might be expected, reductions in state assistance as a result of federal assistance were opposed by the impacted districts. Those districts sought to prevent such actions through court action and by seeking legislative relief from the Congress of the United States. In general, the districts were relatively successful in the Courts in winning their cases based upon either interpretations of state law or the legislative intent of the Congress in adopting impact aid. These court decisions do not limit the power of Congress to make any decision it chooses on whether to allow states to offset the impact aid payments. However, to the extent that they rest upon interpretations of state law, such decisions can mean that some states would be unable to take the impact aid payments into account in calculating state aid even if Congress were to permit them to do so. It should also be noted that many states might well not take such payments into account for political or policy reasons even if permitted to do so.

The quest by the impacted districts for relief from the Congress resulted in the enactment of a provision in P. L. 90-576 that, in substance, cuts off impact aid to all districts in any state that uses impact aid to reduce payments under state aid laws. That legislation provides:

> "No payments may be made during any fiscal year to any local educational agency in any State which has taken into consideration payments under this title in determing the eligibility of any local educational agency in that State for State aids (as defined by regulation), or the amount of that aid, with respect to free public education during that year or the preceding fiscal year, or which makes such aid available to local educational agencies in such a manner as to result in less State aid to any local educational agency which is eligible for payments under this title than such local educational agency would receive if it were not so eligible."

This provision, which is now being implemented, has caused the states to rewrite their state aid formulas to refrain from taking P. L. 874 payments into account. The remainder of this section considers the effects of that action and possible alternatives to it.

Relationship of Equalization Programs and Impact Aid

As noted earlier in this report, the basic rationale of federal impact aid payments is that the federal government may cause an influx of pupils into a school system without providing a corresponding increase in tax base. The result of such action is to reduce the district's tax base per pupil and, without impact aid, to require the district either to reduce per pupil expenditures (thereby shifting the burden onto the students) or to increase taxes (thereby shifting the burden to the local taxpayers). Thus, impact aid tends to channel assistance toward districts that have a low assessed value (tax base) per pupil**, resulting from the fact that the federal government can, and does, introduce pupils into a district without causing proportional increases in the district's tax base. Some state aid programs – the ones we are calling equalization programs – do take the tax base of the district into account. Those programs, to lesser or greater degrees, tend to provide more assistance per pupil to districts with a low tax base per pupil than to districts with a high tax base per pupil.

A Standard Form State Equalization Formula

To illustrate the relationship between impact aid and equalizing state aid Battelle has constructed a typical state equalization formula shown below:

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*By 1965, the following states had taken such action: Alaska, California, Maine, Nevada, New York, Oregon, Rhode Island, South Dakota, Utah, Vermont, Virginia, Washington, Wisconsin and Wyoming.
**And toward many districts that do not.

(116)

(E)(N) - (T)(V) = S where E = the base education program expressed in terms of dollars per ADA

N = the number of students expressed in ADA

T = the stipulated minimum effort tax rate expressed in mills

V = the tax base expressed in units of thousands of dollars valuation

S = the state equalization payment expressed in dollars.

The first term of the formula established what many states call a minimum support level, a level of education that the state will guarantee to every district in the state provided only that they make some minimum tax effort. The calculation of this minimum support level is frequently a complex exercise that takes into account the educational background of the teachers in the district, their years of experience, the number of special education programs provided and other variables. However, in substance, such calculations can be understood by assuming (as the above example does) that the result of such calculations is roughly equivalent to guaranteeing a minimum per-pupil cost. Thus, in the example, the minimum program could be $400 per pupil.

The second term of the formula established the proportion of the minimum program that should be financed from local sources. In many states this consists of taking a minimum tax rate and multiplying it by the actual tax base. In other states the local support requirement is calculated by the use of an economic index. The amount of the state aid is derived by taking the costs of the minimum support program, subtracting the amount that should be raised through local sources, and paying the remainder from state funds.

The main impact of such formulas for present purposes is that they tend to increase state aid where tax base is lower and to decrease and ultimately eliminate state aid when the district's tax base is higher. When applied to a district that had no tax base (because it was a military base), the formula would indicate that the full costs of the minimum support program should be paid by the state.

The Effect of Preventing Offset

In the extreme case of a school district cotermenous with a military base and having essentially no local tax base (there are several such districts in the United States), the interaction of state equalization formulas and federal impact aid formulas will present a difficult problem if neither one offsets the other. Specifically, the state equalization formula will result in a payment to the district that represents the per pupil costs of the minimum state program – say $400.00. The federal impact program will result (if the federal government pays full per pupil costs) in a payment approximating reasonable per-pupil costs – say $600 per pupil. The result would be a standard of education of $1,000 per pupil – an obviously unsatisfactory conclusion from the standpoint of all those concerned except the district receiving the windfall.

It is the above situation in less exaggerated form that has caused states to wish to take the impact aid payments into account in their equalization formulas.* While the less exaggerated situation is much more complex, such a situation must be understood in order to deal intelligently with the issue of the offset of impact aid payments in state aid formulas. An example of such a situation follows.

An Example of the Problem

Perhaps the simplest reasonable example of the interaction of equalization formulas and impact aid payments can be shown through the mechanism of taking a district without federal impact and showing the effects of adding a federal impact composed of the addition of pupils in military base housing to the enrollment of the district. Such a change presumes no change in the tax base of the district. The relevant district characteristics are shown for the situation before the federal impact and after it.

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*Some states have, in effect, considered that P. L. 874 provides unnecessary assistance (windfalls) to districts that should be shared with the states and have tried to offset all or part of the impact aid payments on that basis.

TABLE 8.1. AN EXAMPLE OF A RECIPIENT DISTRICT SHOWING STATE AND FEDERAL AID

Item	Before Impact	After Impact
Students (ADA)	1,000	1,300
Non-federal	1,000	1,000
Federally connected	0	300
Tax base (assessed value)	$10,000,000	$10,000,000
Tax base per pupil	$10,000	$7,680
Tax rate as percent of base	3% (30 mills)	3% (30 mills)
Tax revenues, total	$300,000	$300,000
Tax revenues per pupil	$300	$230
Local contribution rate	--	$300
Impact aid payment	--	$90,000
Total local revenues (local tax plus impact aid)	$300,000	$390,000
Local revenues per pupil (including impact aid)	$300	$300

Source: Invented by Battelle.

In this example the impact aid payment has been set at a rate that exactly leaves the district whole as a result of the federal impact. In a more typical case the federal activity would probably stimulate some increase in local tax base and the impact aid payment might be different, but the example as it stands is sufficiently precise for the purposes intended.

In the example, the federal impact aid leaves the local revenue situation of the district unaffected by the federal impact. The district still gets the same local revenues (including the impact aid payment) after the impact as it got before on a per pupil basis. Assuming that state aid remains constant on a per pupil basis - say at a rate of $250 per pupil, the resulting expenditure per pupil would continue to be $550 per pupil, just as before the federal impact took place. To the extent that the federal aid compensates accurately for the additional burden, no increase in per-pupil state aid is necessary.

Now assume the rare case where the state minimum support level is the same as the per-pupil expenditures of the district, and the district levies only the minimum tax required to participate in the state equalization program. In such a case the state would be guaranteeing a minimum support level of $550 per pupil to the district. The state's payment would be the minimum support level ($550) times the district's ADA, minus the local tax revenues. In the example, even without impact aid, the state's payment to the district would rise by exactly the amount necessary to provide $550 for the federal pupils and leave the district in the same position it was before the federal impact. To the extent that the state aid compensates accurately for the additional burden, no increase in federal aid would be necessary.

Thus in the extreme case of a state equalization formula that reflects the full per-pupil costs of a district and requires only the levy of a minimum tax that is the same as that levied by the district, the federal and state aid programs would exactly duplicate each other. In the example, if the federal aid did not take the state aid into account and the state aid did not take the federal aid into account, the district would have a windfall of $90,000 or about $70 per pupil (including federal and non-federal pupils) from the federal impact.

In a less extreme case the windfall is smaller (but still significant) because the per pupil costs of the district are higher than those provided by the state minimum standard as a result of a tax levy (rate)

(114)

in the district that exceeds the state minimum necessary for participation in the state equalization aid program. For example, assume that the minimum support level in the example were $400 instead of $550 and that the tax rate considered in the state program was 15 mills rather than 30 mills. This would still indicate state aid of $250 per pupil in the case before the federal impact, but the increase in state aid for the federal pupils would not be $550 times 300 as in the first example, but instead would be $400 times 300. As a result the district, without federal aid at all, would find it had a shortfall of $150 times 300 or $45,000 as a result of the federal impact, net of the state aid change. Without federal aid the district would have to increase its tax rate to raise an additional $45,000 or reduce its educational program costs per pupil to save the $45,000. In this example, the windfall to the district stems from the fact that the federal impact payment of $90,000 overpays, because the burden is only $45,000. Viewed another way, the windfall to the district results from an overpayment of state aid.

The Solution

The solution to this problem of overpayments is either to allow the state to take the federal payment into account or to allow the federal government to take the state payment into account. Because allowing the federal government to take the state payment into account to reduce federal aid might discourage states from adopting equalization formulas, it is desirable to consider allowing the state to take the federal payment into account in the type of case presented in the examples.

Yet as the example shows, the federal government should not allow the state to offset the full federal payment. If that were done in the example, the state would be offsetting $90,000 when the windfall to the district from the double payments would only have been $45,000.

The resolution of this difficulty is to treat the P. L. 874 payment conceptually as an addition to the local tax base that is considered in calculating the local support requirement in the state aid calculations. In the case of the foundation type formula considered in the example, one can "capitalize" the P. L. 874 payment by using the districts' own tax rate to determine what tax base would be equivalent to the P. L. 874 payment. To produce the same result in the example given, the regulations could allow the state to offset a proportion of the P. L. 874 payment measured by the proportion that the minimum levy represents of the district's total tax rate. For example, a state might use a minimum levy for foundation formula purposes of 10 mills, but a particular district might be levying taxes at 20 mills. Conceptually the P. L. 874 payment is a matching of local effort: namely, (1) the local effort represented by the proceeds of a 10-mill tax – where the state will make up any tax-raising deficiencies in the local district and (2) the additional effort component of the additional 10 mills where the state guarantees nothing to the local district because the additional levy, by definition, takes the expenditures in the district above the minimum support level in the foundation formulas. From the above reasoning, it is clear that states should be allowed to offset impact aid payments in some situations if impact aid continues to be provided under P. L. 874.*

We find that the effects of the prohibition against offsetting of P. L. 874 payments tend to reduce the effectiveness of attempts by the states to provide relatively equal educational opportunities with limited state funds and to discourage states without equalization formulas from adopting them.** For that reason we recommend that the prohibition against offsetting be relaxed to permit states – should they choose to do so – to treat the P. L. 874 payments as an equivalent increase in local tax base within the context of any formula that uses local tax base to determine the size of state aid payments. Because of the complexity and variety of state foundation formulas, this general rule will require some administrative interpretations to deal with the complex issues involved.*** The impact aid legislation should establish the basic principle stated above and the application of that principle should be handled administratively by the Office of Education in consultation with the affected states and districts.

The above recommendations apply only if P. L. 874 is to be continued in its present form. The present legislation, as noted in Chapter 6, has the major disadvantage of not taking into account either the tax effort of the district or state aid. Thus, if the present law is to be continued – and either states must consider the federal payments or the reverse in order to avoid overpayments – then the only alternative is to allow the states to take credit for some of the federal payments, thereby reducing state aid costs.

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*The Stanford Research Institute concluded essentially the same thing, as follows:

> "Therefore, we conclude that where the state has a foundation program, with equalization aid based on assessed values, it is justifiable for the state to tax P. L. 874 funds into account in determining the amount of equalization aid to give." SRI report, p 33.

**Washington provides an example of the first problem and New Mexico provides an example of the second.

***The types of interpretations are required also under the current prohibition against offsetting.

The impact aid program recommended in this report does take state aid payments into account because the local taxpayers will obviously take such aid into account before voting school taxes. As a result, there is no problem of duplicating state and federal payments in the recommended program and thus no need to allow the states to take advantage of the federal payment in state aid formulas.

Under the recommended program, however, the states do begin to get credit for their contributions to local educational programs when the effect of the state aid is to reduce local tax rates to the point where the per pupil payment would be less than a stipulated minimum payment. Many states are already in this situation.

THE IMPACT AID PROGRAM AND INDIAN EDUCATION

The Indian Education Situation

The American Indian is unique both as to educational needs and as to educational problems. Further, no other group of citizens stands in precisely the same relationship to the federal government. This relationship has been developed out of a history of treaties and laws which gives the United States government specific responsibilities for the protection of Indians and their resources.

Despite all the special Indian programs and treaties and the other activities of the state and federal governments on behalf of the Indian people, the Indian has never attained parity with the general level of prosperity achieved by the average American. The social and economic conditions surrounding the Indians are decidedly and drastically substandard when compared to those of the general United States population. For instance, adult Indians living on reservations are, as a group, only half as well educated as other citizens. Their life expectancy is one-third less and their average annual income is two-thirds less. Nine out of ten Indian homes on reservations are comparatively unfit for human habitation and Indian unemployment rates are many times above the national average. All of this points to the conclusion that the Indian people do not share equitably or perhaps even marginally in the great bounty of their homeland – the world's richest nation.

A recent Congressional study of Indian education provides a thorough review of the Indian education situation.* The subcommittee making the study concluded that "our national policies for educating American Indians are a failure of major proportions. They have not offered Indian children – either in years past or today – an educational opportunity anywhere near equal to that offered the great bulk of American children."** The subcommittee members were shocked at what they discovered in their review of the Indian education situation.

In its study of P. L. 874 and P. L. 815 Battelle had the opportunity to visit a number of school districts that provide education to Indian children. Our observations coincide with those of the subcommittee.

Battelle's study did not attempt to develop a comprehensive program for dealing with problems of Indian education in the context of its impact aid study. Although we would have liked to develop such a program (and would still like to do so), the scope of the impact aid study excluded many important aspects of Indian education (e.g., schools managed by the Bureau of Indian Affairs rather than school districts that get impact aid and payments under the Johnson-O'Malley program), and thus precluded the development of a comprehensive program for Indian education.

Impact aid reaches Indian pupils through the counting of their parents as living and working on federal property when they are living on reservations or similar lands. Because the federal government has caused these Indians to be where they are and because states and their subdivisions cannot levy taxes on either the place of work or the place of residence of these Indians, their continued inclusion in the impact aid program is reasonable.

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*U. S. Congress, Senate, Special Subcommittee on Indian Education, Committee on Labor and Public Welfare, 91st Congress, 1st Sess., Report 91-501, Indian Education: A National Tragedy – A National Challenge.

**p xi, ibid.

(116)

Problems With Impact Aid

There are a series of problems in dealing with Indian education through impact aid. Many of these problems are not at all unique to Indian-impacted schools. Nonetheless, the tendency of the Indian-impacted school to be heavily dependent makes those problems facing all school districts receiving 874 assistance particularly frustrating. In some districts, for instance, in Tuba City and Chenle School districts on the Navajo reservations there is a nearly 100 percent federal impact. Thus, the late impact aid payments provide an excessive hardship on these school districts owing to the degree to which they depend upon these funds for the normal operation of heir schools.

Not only are the Indian districts heavily impacted, they tend to have additional costs associated with attracting teachers to remote areas and extensive transportation operations with exceptionally high transportation maintenance costs arising out of the poor roads which the school buses must traverse. In some ways the concept of determining the local contribution rate on a comparable district or state or nation average works at a disadvantage to those districts concerned with Indians which have these exceptional cost situations because these districts find it impossible to find really comparable districts.

A further problem associated specifically with Indians, and also of minor financial impact in the context of the total program, is the reliance on the average daily attendance count. For a variety of reasons, the Indian student has a greater propensity toward absenteeism that the typical non-Indian student. Thus, the ratio of average daily attendance to the average daily membership is below that faced typically in non-Indian schools. The result of this is that given the same membership, an Indian school would likely receive a smaller base for entitlement than a non-Indian district. Inasmuch as costs are generally incurred on the basis of membership rather than attendance, this high absenteeism works a double hardship on the district. First, the absentee student has to catch up on the work he missed which adds a burden on the system to educate him "out of phase", and second, his absenteeism cuts down the entitlement of a school district and thus reduces the financial resources available for his education.

Public Law 815

Given the present level of funding of Public Law 815, all school districts, Indian or otherwise, are under extreme hardship in that the odds that their needed and justified projects will actually be funded are very low. Public Law 815 was designed primarily to reduce the crises of lack of school facilities which occurred around defense establishments. Thus, it contained a provision that entitlements would be based on a growth in the federally connected school population in the period since 1938. In the Indian case, most of the growth in Indian children occurred prior to 1938, and thus Indian districts becam eligible for Public Law 815 assistance only under the Section 14 provision for assistance for unhoused students. The relatively low priority that P. L. 815 associates with Section 14 thus compounds the problem of less-than-full funding of P. L. 815.

Inasmuch as the end of the waiting line has not been regularly funded in recent years, the Indian situation is one of not receiving P. L. 815 payments. For many Indian districts, this is a particularly unbearable hardship. These Indian districts often lack land-owning voters required under some state laws to obligate the taxable property which is available for bonding purposes. Thus, the school districts of Chenle and Ganado on the Navajo reservation (which have a substantial tax base which could be used as a security to obtain bond funding) have been unable to obtain the bond issue because they did not have registered land-owning voters. Given this situation then, the school district has no reasonable method for financing school construction except through federal and state assistance programs.

The problem is further complicated by the fact that the minimum facilities required to house an Indian school are not necessarily consistent with the minimum facilities of the state (the standard of payment under P. L. 815). For example, the Indian schools have a greater reliance on manual crafts and arts (which require laboratories and workshops) than do typical schools, and thus the number of square feet required per Indian child is greater than that required for typical schools. Further complicating the issue is the fact that many school districts educating Indian children provide housing for the teaching staff on reservation property.

Recommendations

Districts that educate Indian children share with other impact aid recipients many of the frustrations of the current P. L. 874 and P. L. 815 programs. These include uncertainty as to how large the payment will be, uncertainty about the timing of the payments that are made, and underfunding of P. L. 815 in order to provide greater funding for P. L. 874. These problems would be solved in the Indian districts, as well as in other districts, if an impact aid program would be developed that would command the general acceptance of both the Congress and the Executive Branch. That consensus (whether on the existing program, the program recommended by Battelle, or some other alternative) would solve the problems of uncertainty and timing. On the other hand, problems of timing and uncertainty cannot be solved in any other identifiable way.

Of course certain districts could be singled out for first preference in receiving any limited funds, just as the present law singles out the Section 6 schools (run directly by the federal government) for funding before schools run by local school systems. This approach, however, is not a part of Battelle's basic recommended program because that program has been constructed with a view of removing any unnecessary assistance and, to the degree it is successful, will not provide a program which would make the establishment of major differences in priorities a sensible approach.

By providing for, in effect, negotiated payment rates for districts having more than 50 percent relative impact, the Battelle recommendations will permit the Office of Education to take such factors as high transportation costs and special costs of educating Indian children into account somewhat in making payments to these districts. However, this flexibility will be confined somewhat by virtue of its only being available to districts with more than 50 percent relative impact and in its limitation that the combination of federal, local, and state funds cannot be allowed to bring the per-pupil costs of the district to a level of more than 25 percent above average state per pupil costs. To handle the problem of a potential transfer of Indian children from federally managed Bureau of Indian Affairs schools into local schools (and to handle a similar problem in the case of the Section 6 schools) we have recommended that the Commissioner be permitted to include potential transfers from these schools in determining the eligibility of districts. This will have the effect of allowing the Commissioner to make capital contributions (e. g., for a new school to handle transferred Indian students) in advance of the students being in the local school system, and thereby can facilitate such transfers.

In counting students, the Battelle recommendations permit the continuation of the counting as 3 (a) children, the children of Indian parents who are unemployed (distinct from being employed) on federal property. This recommendation reflects a slight "bending" of the impact aid logic to reflect the lesser economic contribution of Indian activities to the economies of local areas. Further, for both administrative simplicity and to avoid penalizing a school district when unemployed Indians take a job off the reservation, the recommendations would abolish the category of 3(b) (1) students and let all such reservation Indian children be counted as 3 (a) students.

For the many districts that educate primarily Indian children, Battelle's recommendations provide for an automatic solution to the problem of lower payments caused by the higher absence rate of Indian children. These districts would be negotiated payment districts, where the federal government, in effect, guarantees a reasonable standard of education rather than making a particular per-pupil contribution.

Battelle has considered a special problem that arises primarily in the State of Maine through the existence of so-called "state" Indians - Indians whose basic treaty rights and obligations are developed through treaties with a state rather than the federal government and who live upon property that is owned by the state rather than the federal government. We have been encouraged to recommend the inclusion of such Indians in the impact aid program on the grounds that these states should not be penalized by making arrangements for Indians rather than letting the federal government do it. This argument has wider applicability than does the impact aid program — as, if the argument makes sense, it also indicates that the programs of the Bureau of Indian Affairs should be extended to such Indian populations.

In summary, the Battelle recommendations would in many ways improve impact aid as a vehicle for providing federal funding for the education of Indian children. At the same time it should be recognized that impact aid is primarily a program for dealing with the impact of the federal government on school support in areas surrounding military base and other larger federal installations. The program can be applied to the Indian student and result in a reasonable level of assistance to districts educating

(118)

such students, but is certainly no substitute for a more direct approach to the Indian education problem. We have, during this research, visited a number of districts that are trying very hard to provide adequate education for the Indian pupils they serve. Many of these districts have gained by what we have called "overpayments" in this report. To develop reasonable recommendations for the nation as a whole, we have had to make recommendations that would reduce the entitlements of some of these districts. This result, while definitely desirable to develop a reasonable impact aid program, is not a step in the direction of improved Indian education. Such steps, it would seem, have long been overdue. When they are made, it should be possible to deal with Indian education directly, rather than somewhat indirectly through the impact aid program. The best resolution of this special problem and others like it not involving Indians (e.g., sudden increases and decreases in federally connected students) would appear to be to give the Commissioner of Education certain discretionary authority in special cases of hardship caused by federal impact. We leave to the Commissioner the resolution of whether the Maine Indians present such a case.

CONTRASTS BETWEEN IMPACT AID AND OTHER FEDERAL EDUCATION PROGRAMS

Many observers suggest that the impact aid program is not a logical part of overall federal strategy for the improvement of elementary and secondary education. The Office of Education now administers many different programs in elementary and secondary education. P. L. 874 differs from all of these other programs in the following respects:

(1) The P. L. 874 applicant need not specify what he intends to do with the funds provided.

(2) There is no restriction against using the federal P. L. funds simply to reduce the amount of local taxes required to finance education.

(3) The factor that gives rise to entitlements (federal children) need not be the object of the expenditure of the program funds.

(4) No reports on accomplishments with the funds are required or made.

(5) The funds are not aimed at a specific educational accomplishment (e.g., a demonstration program), nor are they designed to reach a particular target group (e.g., the disadvantaged or special students) nor to deal with a unique problem (e.g., bilingual education or dropout prevention).

The differences between impact aid and other Office of Education programs do not necessarily mean that impact aid is a bad program. It is entirely possible that there is a need for both impact aid and programs of the more targeted type, and that nothing is wrong with either set of programs merely as a result of their dissimilarity to the others.

The present impact aid program tends to reach the same school systems as some other federal education programs in the case of the large city recipients of impact aid. Data provided by the Office of Education for Fiscal 1969 indicate that the 100 largest city local education agencies received about $106 million in impact-aid payments. These same agencies received almost $300 million from Title 1 of the Elementary and Secondary Education Act and amounts from various other programs amounting to less than $100 million. Many of these large cities receive impact aid under the provision in current law that allows districts with 400 or more federally connected students to claim payments even though they fail to meet the eligibility criterion of 3 percent federally connected students as a percentage of total students. Other large cities may exceed the 3 percent threshold by a small amount. Practically all of these cities would either fail to be eligible for the proposed new impact aid program or would receive quite small payments under the new program by comparison to the current one. The exceptions to this statement will be the few major cities that owe much of their present characteristics to federal activities, for example, Washington, D. C., San Antonio, San Diego, Denver, Fort Worth, Long Beach, Oklahoma City, Norfolk, Honolulu (State of Hawaii), El Paso, Dayton, Wichita, and Albuquerque.

However, in the most heavily impacted districts (excepting Indian districts that receive large amounts of Johnson-O'Malley and ESEA Title 1 funds) other federal educational programs tend to be a minor factor. For example, the disadvantaged students that form the basis for Title 1 payments are not normally found in districts that serve military dependents. Because other federal educational programs involve earmarking funds for specific purposes or groups, there is really no substitutability between them and impact aid.

However, there is substitutability of federal programs possible in the districts that would not receive substantial assistance under the recommended impact aid program, but do get substantial impact funds now. Because the major change in the entitlements of lightly impacted districts flows from the recommendation to pay for above average impact only, the districts most adversely affected by our impact aid recommendations are those that can be reached by any program of federal assistance that allocates on the basis of total students or, as revenue sharing, total expenditures from local sources.

IMPACT AID AND SCHOOL CONSOLIDATION

In general, the impact of P. L. 874 upon school district consolidation will be relatively minor in all states. The amounts involved are a comparatively small portion of the total budgets in most recipient districts, and school finance is only one of the elements entering into a decision to consolidate. Most frequently, consolidation decisions are influenced most strongly by (1) state minimum size and curriculum standards, (2) prospects for educational improvement or cost reduction through consolidated offerings, (3) racial and ethnic issues, (4) the potential location of the schools that would be operated by the reorganized district, and (5) school athletics. By comparison to these issues, school finance issues stemming from disparities in per-pupil tax base will be significant, but the P. L. 874 component of the school finance issues will not often be particularly significant.

A minimum of ten federally connected students is required for participation in P. L. 874. For a district that can reach the 3 percent requirement but not the minimum, consolidation with another district will promote P. L. 874 eligibility if the combined district would reach the minimum of 10 students and would have at least 3 percent of its students federally connected. This factor would only have an impact in the case of very small (less than 350 ADA) districts.

A district is eligible for P. L. 874 if it has 400 federally connected students regardless of the percentage of total ADA represented by these students. Theoretically, P. L. 874 provides an incentive for the consolidation into a larger district of districts that do not have the 3 percent minimum, but could reach the 400 federally connected pupils through consolidation. However, this impact would be minor as even in the most extreme case (400 students and 2.99 percent impact) the federal funds involved would be likely to be less than 2 percent of the district's budget.

Except for these extreme and somewhat speculative cases, the present P. L. 874 program is essentially neutral with respect to consolidation except in the case where a district with P. L. 874 is considering merger with a district without it. In this case the combined enrollment may fail to meet the 3 percent eligibility threshold, in which case P. L. 874 could discourage consolidation.

Battelle's recommendations, like the current 3 percent eligibility requirement, create a situation where a state's entitlements are increased if its federally connected students are concentrated in a few school districts. The Battelle recommendations (which provide for no payment on federal pupils up to 3 percent of ADA) remove much of the incentive to avoid merging a barely eligible district with a non-eligible district to create a non-eligible district. Because under Battelle's recommendations the barely eligible district gets a very low payment, consolidation would be less discouraged than at present.

The price of improving one consolidation situation, however, is to worsen another. Because the Battelle recommendations deal favorably with the heavily impacted district, they are not neutral under circumstances where a small heavily impacted district could be consolidated with a much larger but less impacted district. However, the situation is not much more serious than at present as is shown by the following examples:

(1) If the small district is eligible, but the larger district fails to meet the minimum requirement for federal connections even after consolidation than neither the present law nor the Battelle proposal will provide for payment of the new district.

(2) If the small district is eligible, but the larger district is not eligible before consolidation but exceeds 3 percent after consolidation, the present law provides a greater incentive

(120)

for consolidation because it would enable the new district to count all federally connected pupils, while the Battelle plan counts only those federal connections that exceed 3 percent of non-federal ADA.

(3) If the small district and the large district are both eligible the present law is neutral - all federal students will be counted in the new district. The Battelle plan is also neutral as the number of federal students in the new district will be reduced by the same number (3 percent of non-federal ADA) as in the old districts considered separately.

Because the impact of federal installations tend to spread over a relatively wide area, it is reasonable to assume that case 3 above will represent the bulk of school consolidations affected by both the present law and the proposed changes to it.*

EARMARKING FUNDS

One of the questions put to Battelle as part of the scope of this study was "How are the P. L. 874 funds being used by the local education agencies?". The simple answer to this question is that recipients use these funds in the same way that they use other general fund revenues such as state aid and local taxes. In some heavily impacted districts, the funds are used to defray nearly all of the educational costs of the district. In most other districts they are budgeted as a revenue source along with other revenue sources in order to reach an estimate of total revenues available. The expenditure side of the recipient's budgets deal with such outlays as teacher salaries, maintenance and the like. While total expenditures tend to approximate total revenues for obvious reasons, no single revenue source can be associated with a particular expenditure category. In some fiscally dependent school districts, the town or county approves a school budget before the P. L. 874 payment is known with certainty. In some states this means that the benefits from a higher than expected P. L. 874 payment go to the parent municipality or county in the form of a reduced obligation to fund the school budget through local taxes. Conversely, a lower than anticipated P. L. 874 payment simply increases the amount the local government is obligated to pay for. Because of the uncertainty of P. L. 874 payments in recent years and the serious problems of timing that have been encountered in making payments some districts where the impact aid payment is a tiny proportion of total revenues may use the P. L. 874 payment for special end-of-the-year discretionary purchases of equipment or supplies.

We see nothing wrong with any of these methods of treating impact aid funds. An impact aid payment is made because the federal government finds that without such a payment a district would have "insufficient" revenues as a result of some federal impact. Northing in that theory suggests that the federal government should stipulate any uses of the funds provided. All of the suggestions for earmarking of impact aid funds we have heard in the course of this study are, explicity or implicitly, based upon the presumption that impact aid is a politically necessary evil, but as long as we must have it we should make sure the funds are used for a good purpose through earmarking them. This report, by contrast, seeks to develop a sound program of impact aid payments, thereby hopefully removing the temptation to earmark funds through this type of "necessary evil" argument.

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*To prevent any impact of discouraging consolidation of heavily impacted small school districts, Battelle has recommended a transition clause for mergers of heavily impacted districts that guarantees, in certain narrowly defined cases where the Commissioner uses this authority, that the proposed merger would not result in a sharp cut-off of impact aid. In the long run, even with this provision, the federal government's costs are reduced by such mergers.

(121)

CHAPTER 9: THE ISSUE OF PUBLIC HOUSING STUDENTS

BACKGROUND

For some 30 years, the federal government has assisted local governments in building public housing units. Besides encouraging the construction of these units the federal government also administers a variety of programs such as rent supplement and low-interest-rate loans designed to expand the supply of safe, decent, and sanitary housing for persons with low and moderate incomes. Under all of these programs, the owner of the housing is normally not the federal government. In the case of public housing units, the owners are local housing authorities that finance the construction of the units through federal guarantees of payment of the debt service on bonds issued by the local authority. Operating costs of the units are usually covered by the rent paid on them, although many local housing authorities are beginning to find that their rents are insufficient to cover operating costs.

The fact that the public housing units are not owned by the federal government means that public housing differs considerably from the housing which normally gives rise to entitlements under the impact aid program. The government housing that gives rise to impact aid entitlements is government housing created for reasons ancillary to the performance of another function. Examples are housing for rangers in national parks and housing for military personnel on military bases. For this reason, and because the federal government did not own properties directly, public housing has never been counted as a part of the federal property used for purposes of calculating P. L. 874 entitlements.

This situation has been under attack, primarily by representatives of large-city school districts. The case which these representatives make can be roughly summarized as follows:

> In many cities, public housing units reflect a substantial portion of the homes of pupils. These public housing units are by law exempt from taxation. The payments in lieu of taxes made by local housing authorities are first divided among school authorities and other taxing authorities, and second are available only in quantities which are clearly below the cost of educating pupils who come from these properties.

This logic, plus the obvious financial significance of including public housing in impact aid entitlement calculations produced considerable interest among large-city school leaders in including public housing in the impact aid program.

One approach to the desirability of including public housing in the impact aid program would be to ask simply whether or not the districts which would receive such revenues need them, and if the finding is "yes" to conclude that any program (of which impact aid may be one) that increases federal payments to them would be desirable. The purpose of this study is not, however, to pass judgment on these questions of overall policy, but rather to consider the characteristics of public housing as they relate to the purposes of the impact aid program. This, in turn, requires analysis of the economic impact of public housing on the revenues and costs of school systems.

ANALYSIS OF BURDEN

From Chapter 2 it will be recalled that one approach to the measurement of the burden of federal activities looks directly at the added costs that the activity imposes upon a school system and subtracts any added revenues stimulated by the activity to calculate the appropriate entitlement. This approach we have called the service burden concept. In applying this concept to public housing, it is important to focus carefully upon the specification of the federal activity involved.

There can be little question but that the costs of educating the children who live in public housing units are (or should be) higher than educating other pupils in a school district. One impact of public housing is to concentrate in one area a large number of school-age children, frequently the children of mothers who are recipients of AFDC (welfare) payments. These children have educational problems which are generally conceived to be more serious than the problems confronted with residents of privately owned housing. These children, who are normally referred to as the "disadvantaged", tend to have a higher incidence of health, emotional, and mental problems than those in other income and socioeconomic groups. In addition, the school's task in the areas of both health and education are magnified by the fact that somewhat less work is done with these children in the home than is the case for the average school child. Under these circumstances there is no doubt that the public housing students represent a problem for a school district.

Under the service burden concept of impact aid, however, these added costs of educating public housing pupils are only relevant if they are caused by the federal activity upon which payments are to be based. The federal government pays the added costs of a military dependent moved to a school district in Texas because the added costs of educating that dependent would not have occurred in that Texas district except for the action taken by the federal government.

Unless one assumes that the federal government is responsible for all disadvantaged children* then the relevant question becomes: Does the federal public housing program cause all or some of these children to be residing in a particular school district rather than some other school district? The answer is that public housing clearly does not have the impact of drawing significant numbers of additional students into a school district. Because of long public housing waiting lists in many communities and the need to be a community resident to get on the waiting list, public housing cannot draw persons to a community who would not otherwise be there. Recent migrants may ultimately be housed in public housing after having been drawn to a community by higher welfare payments or presumed greater job opportunities, but in that case the welfare payments or the presumed job opportunities, not the public housing, are the force attracting the new students.

A very limited exception to these conclusions may arise where public housing is made available to residents of a particular metropolitan area in a school district different from the district in which they have been living. This situation would arise, for example, if a suburban community were to begin to construct new public housing units to provide for low income persons formerly living in the central city. Predictably, suburban communities have been reluctant to organize housing authorities for this purpose.

Even if public housing did not directly cause new students to move into a school system, it could be argued that new students were an indirect effect of the public housing. If, for example, there were a low income housing "shortage" and major public housing expenditures tended to make privately owned units (out of which the public housing occupants might have moved) more readily available, perhaps families would be drawn to the community by the availability of this housing. However, in any given time period the pace of public housing construction in most cities is sufficiently small so that it is difficult to imagine this effect upon the community's total housing stock. Equally important, it is doubtful that a slight reduction in housing costs in major cities would leave a situation where a family could reduce its housing costs by migrating out of such low housing cost areas as Appalachia and the rural South.

Thus, we conclude that the construction of public housing units does not normally have a significant effect upon the costs of providing education in individual school systems.

Public housing may have one relatively minor impact in that it shares with any large-scale residential construction activity the impact of changing the location of personnel to be served by schools. Frequently, the location decisions made by public housing authorities will not relate to the past planning and school construction situation of the school district in which public housing is to be located.** Under this circumstance it is possible that expenditures may be required for the construction of new schools to serve public housing students. On the other hand, new public housing projects may redistribute school age children away from crowded schools in the district and toward schools that otherwise would not be filled. In any case, this impact is relatively minor as school districts have already made adjustments to housing units constructed in the past and current housing policy calls for more scattered sites rather than the large public housing projects of the past.

Based upon the fact that construction of public housing does not normally cause students to move into a school district, the impact aid principles would indicate that the federal government should not bear the costs of educating public housing students except to the extent that such payments may be required to offset tax losses.

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* In which case the ESEA Title 1 formula should be expanded to include all costs of educating such children, as expanding impact aid fails to cover disadvantaged students not living in public housing.

**Of the 513 districts responding to Battelle's questionnaire and having public housing projects in their community, only 47 reported that they had participated in any phase of planning of new low rent public housing projects in the past 3 years.

Impact on Revenues

The Public Housing Site. When public housing is constructed, land is occupied that otherwise could be used for some other purpose. It is possible to compare the taxation on the land before the housing was constructed with the payments in lieu of taxes paid on the public housing to determine whether a school system has been made better or worse off by the new use of the land. Various comparisons of this type have been made in the past. Partly because considerable public housing was constructed on land previously owned by local government (and thus tax exempt) these tended to show that the public housing payments compared favorably with taxes paid on the land before it was used for public housing.

Of course, this before and after comparison is not necessarily the relevant one. The real problem is to compare the payments made in lieu of taxes on the site in a particular year to what those payments would have been if there had been no public housing. This question then raises the speculation of whether, had the site not been occupied by public housing, a site might have been used for high value industrial property. However, even this speculative comparison does not exhaust the economic issues involved. For example, a site might be used for public housing and thus, preclude its use for industrial purposes. However, it is entirely possible that the potential industrial user simply located somewhere else in the same community, in which case the community still reaps the taxes from the industry, despite the preemption of the site by public housing.

The Former Residence. Assuming the most serious possible impact on tax base, suppose that when a family moves from a tax paying piece of property to public housing, the entire value of the previous residence disappears entirely from the tax rolls and thus that tax on that property is no longer available to support the schools. Given this assumption, it has been argued that the revenue impact on the school system is to lose the average residential tax base per pupil in the district for every pupil who moves to public housing. If calculations are made on this basis it can be shown that the revenue losses from having pupils move into public housing is substantial – on the order of $150-$400 per pupil. Some arguments for basing impact aid entitlements on public housing have proceeded on this basis, in effect indicating that the federal government is responsible for the fact that public housing pupils do not contribute average residential taxes.

The assumption is, of course, false. Public housing families are not average. Eligibility criteria for public housing require that these families be substantially below average incomes in the community. Families do not move out of four bedroom-two bath newer homes and into public housing. These families tend to move out of quite poor housing – poor in terms of housing quality and poor in terms of the taxes that can be levied on it.

A reasonable illustration can be easily constructed. In a Northern city a family moving into public housing may well have come from one "apartment" in a single house that has been broken up to serve three separate families. Typically such a dwelling may have a real value (in market terms) of, say, $15,000. Its assessed value would be some lower amount, reflecting standard practice of assessing at less than true value. With an assessment ratio of 40 percent (as in Cleveland, Ohio) the assessed value would be only $6,000. At a comparatively high tax rate of 40 mills for school purposes this would indicate school taxes of $240 on the entire property, or some $80 per year for each of the three families. Assuming two children in the family to move to public housing, the loss of tax would be on the order of $40 per child – a figure closer to the payments in lieu of taxes on public housing than to the $200-$350 per pupil that would be paid if students were counted as being part of the impacted areas program.

To check these calculations, Battelle did a special study of residential taxation in New York City. With the cooperation of New York housing authorities a residential area (coterminous with an elementary school attendance area) was chosen for study because it represented the prior address of a number of New York public housing tenants. The number of public school students living in the area – all of which is privately owned housing – was calculated and divided into the total school property taxes paid by all residential property in the area. The results indicated that these property tax payments (including properties occupied by families without any children in public schools) amounted to about $70 per pupil.

In the real world of assessment practices, it is unrealistic to assume that the movement of a family toward public housing will remove the former dwelling from the tax rolls. Even in the extreme case where the private housing is torn down, the land remains on the tax rolls. Where the dwelling remains standing, even if unoccupied, the assessment will not change for many years.

(126)

In-lieu payments. Respondents to Battelle's questionnaire (that was transmitted only to those districts that now receive P.L. 874 funds) indicated their payments in lieu of taxes from public housing and the number of students in public housing when they knew them. Based upon those respondents (accounting for some 922,044 students) the average per pupil payment in lieu of taxes was $10.33 annually.

Conclusion

The above analysis would tend to indicate that the payments in lieu of taxes made by public housing authorities do tend to understate the probable tax loss associated with public housing projects by an amount that is likely to be somewhat less than $100 per pupil. It is probable that these in lieu payments also understate the probable tax loss to taxing jurisdictions other than schools such as county and city governments. This problem, to the extent that it exists, is therefore a problem involving the interaction of public housing policies and local taxing jurisdictions of all types.

Whether these in-lieu payments should be increased is a question that cannot appropriately be addressed by this report. In part the question involves whether increased in-lieu payments would be a more appropriate use of federal housing funds that other possible uses. In part, the question involves a series of indirect transfers within the federal budget. If-in lieu payments were increased either local housing authorities would have to increase rent (which should over time cause welfare payments to rise to meet the added costs for the large percentage of public housing residents that rely upon such payments) or the federal subsidy to the authorities would have to be increased.

The implication of this analysis for impact aid payments is that it would be inappropriate to blanket public housing pupils into the present impact aid program. The cities in which public housing is concentrated tend to have local contribution rates in the neighborhood of $400 per pupil, which would indicate a federal payment of $200 per pupil for each public housing child, assuming that unemployed parents were presumed not to be working on the federal property. Such a payment would be excessive in terms of net burden concepts.

The payment of a smaller amount, e.g., something less that $100 a pupil, would be possible, but it would be more appropriate to make that payment through housing appropriations than education appropriations. The impact aid local contribution rate is geared primarily to estimating the additional costs of educating pupils, while the justification for public housing payments would have to be some kind of a tax loss concept.

Another factor worthy of consideration is that the public housing projects have been constructed in response to local government decisions to build such projects under ground rules that were known in advance to them. In this sense, the public housing impact has not been imposed upon the local area in quite the same way that the federal government can buy land and build a new military base without the consent of local governments.

On the whole it would seem that if public housing is to be considered as a federal impact, the payments should not be made under the same formula as regular impact aid and probably should not be made with federal education funds rather than federal housing funds. This conclusion is fortified by the analysis in the following section.

OTHER REASONS TO INCLUDE PUBLIC HOUSING

The question of whether impact aid funds should be provided on the basis of children in public housing is really a much broader question than whether public housing provides certain burdens of the type that impact aid programs are designed to meet. The Congress, has, in the past, shown considerable willingness to accept additional recipients in the impact aid program even when the relationship between the additional aid provided and net burden concepts has not always been clear.

Under these circumstances it is certainly legitimate to consider the overall question of public policy of whether it would be a good idea for the federal government to spend roughly an additional $250,000,000* (the amount required to treat public housing students as 3(b) children) to enhance the operating revenues of the school districts which receive pupils from public housing. That is, should an increment of federal assistance to schools concentrate heavily in those areas where public housing is found? For a variety of reasons it can be argued that it should.

Aiding Disadvantaged Children

A very strong case can be made that disadvantaged children (defined loosely as children tending to have a greater than normal concentration of broken homes, low incomes, poor medical care, and lack of educational opportunity and stimulation in the home environment) need and deserve greater educational efforts than those made by school systems on behalf of children who are not disadvantaged. A strong case can also be made that the admission criteria for public housing tend to guarantee that a large percentage of the children living in public housing will also be disadvantaged. Given these two situations, including public housing in impact aid is an indirect way to provide assistance for disadvantaged children.

The difficulty with this approach is that public housing inclusion in impact aid is clearly an inferior alternative to other methods of providing educational assistance to disadvantaged pupils. First, impact aid funds are inherently not earmarked for specific purposes. Because these funds, conceptually, take the place of local taxes there is no rationale for earmarking them for the benefit of any group – the disadvantaged, the advantaged, or federally connected pupils. Because there is no earmarking there is no guarantee that funds provided on the basis of public housing pupils would, in fact, be used to benefit those same pupils. In fact, given the horrendous fiscal problems of many American cities, there may be some reason to believe that such funds would result in making it possible to increase school taxes less than would otherwise be the case, thereby converting them into local tax relief rather than direct assistance to disadvantaged children.

If the objective is really to improve the educational opportunities of disadvantaged children through federal aid, an obvious alternative to impact aid is a program that has a distribution formula targeted toward disadvantaged children, rather than children living in public housing. Such an obvious alternative would also require that the funds be spent on behalf of the disadvantaged children and that the funds supplement local efforts. In fact, Title 1 of the Elementary and Secondary Education Act is designed in just this fashion, and would appear to be clearly superior to impact aid as a vehicle for targeting assistance toward children.

Aiding Large Cities

Many of the nation's most significant educational problems are to be found in our major central cities. These problems arise only in part because of the educational difficulties encountered in these cities. A significant part of the problem has fiscal roots related to (1) heavy demands upon available taxes for municipal services, (2) an increasing percentage of tax exempt property, (3) the failure of industry and commerce to locate new installations in central cities – in part related to high tax rates in these cities, and (4) a declining ability to provide local taxes for schools resulting from relatively low personal income of many residents and increasing (and legitimate) fears of driving industry and commerce out of the cities entirely. To many Americans (including the senior author of this report) these problems cry for a combination of federal and state actions. However, in the current context the question is not whether these problems exist or whether action should be taken, but merely whether impact aid provides a reasonable vehicle for dealing with them. We conclude that it does not.

One major difficulty in using public housing entitlements as a method of aiding large cities is that a substantial percentage of the federal funds expended will miss the intended target. Public housing is by no means a uniquely central city phenomena. Public housing is found in many rural communities in the south and in a number of smaller northern communities that by no stretch of the imagination share the basic problems of the nation's great cities. These districts would receive public housing payments on the same basis as the central cities. This fact alone means that public housing entitlements are a less efficient way of aiding central cities than identifying the cities to be aided and targeting a program solely for them would be.

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*This is a rough estimate based upon multiplying the number of non-elderly public housing units by 1.65, which appears from Battelle's data to be a reasonable approximation of students per unit, and multiplying the result by half of a presumed average LCR of $400 for the districts with public housing entitlements.

A second major difficulty is that the prevalence of children in public housing is not a good proxy for existence of central city problems. Over the past three decades different cities have made radically different decisions about public housing. Some have as a matter of policy avoided major public housing commitments on the theory of avoiding federal action in what they may have considered to be a local matter. Others have seized upon public housing as the cornerstone of local policies for dealing with housing and community development. These decisions in the housing field are not related to either the educational problems of the city nor to the financial crisis (or lack thereof) that the city might be facing.

As a result, the concentration of public housing varies substantially among cities in the United States. When public housing children are related to total pupils, disadvantaged pupils, or even to total population or tax capacity of a city, it can be demonstrated that public housing children are a poor indicator of anything that might be a proxy for educational need in the cities. This impact can vividly be seen from the data shown on Table 9.1. This table was constructed from some of the responses to the Battelle questionnaire from cities that were able to provide an estimate of the number of children who reside in public housing. The estimates of entitlements are based upon this data and the 1967-68 local contribution rate for each district included in the table. First, entitlements under the proposed inclusion of public housing were calculated. Second, these entitlements attributable to public housing were totaled for the districts covered. This total was divided by the total number of pupils in the systems to indicate what payment per pupil could be made if the funds were used to make such per pupil payments, rather than basing payments upon public housing. A similar calculation was made on the assumption that the funds would be distributed on the basis of the number of disadvantaged pupils (using pupil counts provided by the Office of Education) in each district.

TABLE 9.1. EQUAL-COST ALTERNATIVE PROGRAMS FOR LARGE CITIES

Amount of Entitlement in $Million.

City	Include Public Housing in P.L. 874	Pay $10.87 per Pupil	Pay $51.03 per Disadvantaged Pupil
Los Angeles	2.8	7.0[(a)]	4.9
Detroit	1.5	3.2	6.4[(a)]
New Orleans	2.4[(a)]	1.2	1.3
Boston	3.9[(a)]	1.0	1.1
Louisville	0.3	0.5	0.7[(a)]
Long Beach	0.5	0.8[(a)]	0.5
Birmingham	1.5[(a)]	0.7	0.7
Norfolk	1.8[(a)]	0.6	0.7
El Paso	0.3	0.7[(a)]	0.3
Akron	0.4	0.6[(a)]	0.2
Nashville	1.9[(a)]	1.0	0.5
Total	17.3	17.3	17.3

(a) Denotes highest entitlement available to city under the three formulas.
Source: See text.

Table 9.1 shows clearly that the public housing distribution does not correspond at all well with the distributions that would result from targeting assistance on the basis of total pupils in large city systems or from targeting assistance toward disadvantaged pupils in large cities. The striking disparities that result from using public housing as an allocator of assistance can be seen from Table 9.2 below. This table is based upon the data used to construct Table 9.1.

127

TABLE 9.2. EXTREMES IN ALLOCATION EFFECTS OF AID INCLUDING PUBLIC HOUSING

Public Housing Payment per Student (Payment ÷ ADA)	
Los Angeles	$ 4
Boston	44
Public Housing Payment per Low-Income ADA	
Detroit	12
Louisville	23
Boston	185
Nashville	190

Source: See text.

If inclusion of public housing is considered as a way to assist the big cities with educational problems, it provides extreme disparities in assistance. It is difficult to find a rationale that would indicate that big city problems in Boston are so much worse than those in Los Angeles that Boston should receive 11 times as much per pupil as Los Angeles. Likewise it is difficult to imagine that Nashville differs from Louisville so much as to justify payment some 9 times as much per disadvantaged pupil residing in Nashville as in Louisville. These perverse distributions result from the fact that the incidence of children in public housing is only remotely related either to the total educational problem of large city systems or to the disadvantaged children in various systems.

In short, if the problem to be solved is big city education or education of the disadvantaged it will always be both more equitable and more efficient to address those problems directly rather than trying to address them through public housing allocations under impact aid.

Effect on Impacted Districts

As noted in Chapter 5 it is a strong recommendation of this report that a program of assistance to impacted districts be developed that, by solving the current problems of P. L. 874, will command Congressional and Administration assent to full funding as part of a cost of doing business for the federal government. Such a program should be funded almost automatically, much like payments of interest on the national debt. A general program of assistance to large cities through impact aid would convert it to being in a competitive relationship with funds for the heavily impacted districts under circumstances that might cause less than full funding for those districts. This impact would be even stronger if public housing were added to the current very imperfect P. L. 874 and P. L. 815 programs.

Effect on Housing Policies

Inclusion of public housing in P. L. 874 would also have significant effects upon the administration of public housing programs. The effect of inclusion of public housing in 3(b) entitlements would be radically to alter the balance sheet facing any community in deciding whether to adopt public housing. Viewed in the abstract from the standpoint of the school district or a city in which the school district is dependent the situation might be roughly this: A family is currently occupying one portion of a slum dwelling, with respect to which taxes are paid out of that family's rent on the order of perhaps $50 to $150 per a three-child family or less than $50 a child. If the community could convert that family from its currently privately owned unit to public housing where impact aid entitlements were available, it would find several phenomena would result. First, the community would receive payment in lieu of taxes on the rental payments made for the public housing unit. Second, the school district would receive a payment on the order of $200 per pupil which in the example would mean $600 in added revenues resulting from building the new housing unit.

128

Furthermore, in deciding which families to admit to existing public housing units, there would be strong pressure upon local housing authorities to maximize the number of children housed in such units.

Whether these housing policy impacts are desirable or not is somewhat beyond the scope of this study - not because Battelle does not feel competent to judge those impacts, but because those impacts are most properly considered in relation to the various alternatives available in the expenditure of federal housing funds. It may be that, for reasons of housing policy, payments in lieu of taxes should be increased, or special side payments for school costs should be made to induce suburban districts to accept new public housing units. However, if these payments are to be undertaken to further national housing policies, they are most appropriately included in national housing budgets.

SUMMARY

For the reasons outlined in detail above, there would appear to be no satisfactory reason for broading the impacted areas program to encompass children occuping public housing units. If Congress and the Administration are concerned with problems of large city education, they will find that the most appropriate vehicles for implementing that concern are outside the scope of a reasonable impacted area program.

CHAPTER 10: THE RECOMMENDED PROGRAM

INTRODUCTION

The preceding chapters of this report have been designed to lay the groundwork for the final recommendations contained in this chapter. This chapter does not attempt to repeat the analysis of those chapters, but does include some discussion of the relationship between the recommendations and existing law and a summary comment explaining the basis for each of the recommendations. The basic format of the recommendations is that of draft legislation to replace the current P. L. 874 and P. L. 815. This vehicle was chosen so that the precise impacts of the recommendations can be related to existing legislation. Despite this format, it should be understood that the following pages are not intended to represent a complete draft bill, as they make no attempt to handle the many circumstances where there are cross references between P. L. 874 and other federal education legislation. Further, these recommendations do not deal either with the pin-point or major disaster provisions of the present legislation. Under the Battelle recommendations, those provisions would be separated from the legislation dealing with impact aid.

THE RECOMMENDED PROGRAM

Section 1: Declaration of Policy

In recognition of the responsibility of the United States for the impact which certain federal activities have on certain local educational agencies, the Congress hereby declares it to be the policy of the United States to provide financial assistance (as set forth in the following sections of this act) for those local educational agencies upon which the United States has placed financial burdens.

This language is similar to that currently found in P. L. 874, but has been shortened by the exclusion of specific discussion of the nature of the burdens imposed by the federal government. Federal activities can have positive, as well as negative, impacts upon a local education agency. Rather than attempting to change the current Section 1 discussion to reflect the multiplicity of concepts of burden described in this report, the language stops with a simple declaration of federal policy to provide a program of federal assistance to local educational agencies upon which the United States has placed financial burdens.

The current Section 1 of P. L. 874 indicates federal responsibility for the impact of federal activities on local educational agencies "in the areas in which such activities are carried on". In fact, the current program and the Battelle recommendations would aid many school districts that are geographically remote from the area where federal activities take place. The current program and the Battelle recommendations allow a district to claim as federally connected children those of uniformed military personnel, even though they may be stationed overseas, or within the United States but far away from the district educating the children. To conform to this practice, the recommended declaration of policy drops the words "in the areas in which such activities are carried on".

Section 2: Eligibility for Assistance

(A) Any local educational agency shall be eligible for assistance under this Act with respect to any year in which the number of equivalent federal pupils in average daily attendance equals or exceeds three percent of the total average daily attendance of that local education agency. Equivalent federal pupils shall be defined as (1) the number of pupils who reside with parents on federal property and (2) forty percent of pupils not residing on federal property who have one or more parents working on federal property or on active duty in the uniformed services (as defined in Section 102 of the Career Compensation Act of 1949.

This provision would, in substance, continue the methods for determining federally connected students under current law. Under current law (Section 3(a) of P. L. 874) pupils upon which the full local contribution rate is paid are required to be both resident on federal property and to have a parent either employed on federal property or in the uniformed services. The recommendations liberalize this category by requiring only that the pupil resides on federal property. The practical effect of this change is small as government agencies do not normally provide housing on federal property except for federal employees. The limited exceptions primarily involve Indians who work off the reservation (which is defined as federal property). The proposed change would eliminate the category of 3(b) (1) students from current law by allowing full payments with respect to such students. The cost of this change is not likely to exceed two million dollars annually. The change will simplify administration of the legislation and relieve an inequity associated with the administration of current law as applied to unemployed Indians living on reservations who find employment off the reservation.

The provision would also continue to include the pupils counted under Section 3(b) (2) and 3(b) (3) of the present law, but would combine the two categories of students. Under present law the federal property upon which the parent is employed must be "situated in whole or in part in the same State as such agency or situated within reasonable commuting distance from the school district of such agency". As a practical matter it is difficult to administer a cut-off of pupils where the parent works on federal property outside of reasonable commuting distance as to do so would require data on the distance between each of the 4,000 plus districts covered by the program and each of about 6,000 separate properties upon which parents work. The costs of acquiring these 24 million items of data do not merit the savings to the federal government involved, and in fact these data are not available to administer the current provision. As currently administered the practical impact of the commuting distance limitation is to avoid payments based upon pupils whose parents work on federal properties outside of the United States unless such parents are in the uniformed services. The impact of dropping the commuting distance exclusion will be to allow pupils to be claimed where the civilian parents are temporarily working on federal property as a result of construction projects or assigned on federal property overseas. Thus, the recommendations would apply the same rules for civilian employees of the federal government as are now applicable to military employees. Economically, the impact of the two groups is the same. If the parent were not working for the federal government it seems reasonable to assume that he would (a) be working for a private employer where his children live (thus generating tax revenues on the place of employment) or (b) working for the federal government where his children live (thereby generating impact aid payments) or (c) working and living at some other location (thereby relieving the school district of the necessity of educating his children). Because of the difficulties in administering the commuting distance exclusion, the impact of dropping it would be quite small.

The provision adopts the principle of using the same approach to the (b) pupils in the eligibility criteria as is used in the payment formula. Current law considers the (b) pupils to have the same impact as (a) pupils for the purposes of determining eligibility but considers the (b) students to be half a local responsibility and half a federal one for the purpose of making payments. Further, the provision reflects the recommendation that the payment rate for (b) pupils be reduced to 40 percent of the rate for (a) pupils.

The effect of the proposed change in eligibility will be to make no change in current law for those districts claiming on the basis of (a) pupils but to tighten substantially the eligibility provisions for those districts claiming solely upon the basis of (b) pupils. The change will cause a striking reduction (over 1,000) in the number of districts eligible for assistance but a smaller reduction in total program costs, because the districts affected by it tend to be those with low entitlements. This change will have its most pronounced effects upon the many districts that claim entitlements upon the basis of a small percentage of its parents who commute to work on military installations located a significant distance from their residences. For example, some federal installations give rise to entitlements in nearly one hundred different school districts. For the few school districts located near the installation there is a reasonable presumption that many of the federally employed parents moved to the district because of their federal employment. On the other hand, for the remaining districts the most likely situation is that the parents were (and would be) resident in the district before obtaining federal employment but decided to improve their incomes by accepting federal employment. In such a situation the federal government does not cause the students to be in the school district. In these situations a relatively tight eligibility criterion serves as one of the ways in which the recommended program counteracts the inevitable overestimate of federal burden upon school districts that is inherent in the student count methods.

A second important reason for the proposed change is to confine the impact aid program to those districts that have more than an average federal impact. The 3 percent eligibility threshold was determined by calculating the percentage of federally connected students (counting the (b) students at

40 percent) that every district in the United States would have if the federally connected students were distributed uniformly among all districts in the United States. By definition, a district with average federal impact would get just as much money from a federal education program that distributed funds on the basis of all pupils as it would from a federal program that distributed the same total of funds on the basis of federally connected pupils.

The recommended program thus targets federal impact money specifically to those districts experiencing an above average federal impact, and only to those districts.

The current legislation allows an exception to its eligibility provision of 3 percent federally connected students in the case of districts that have at least 400 such students. The effect of this exception was to allow large-city school systems to participate in the program, even though they did not have the minimum percentage impact previously required for eligibility. This exception is not justifiable on the grounds of the economic impact of federal installations and also serves to favor large districts (that can claim on the basis of less than 3 percent impact and 400 students) over smaller districts (that cannot claim on the basis of less than 3 percent impact because they do not have 400 federally connected students). While the educational problems of large cities may well justify some program of federal assistance, the appropriate vehicle for that assistance should not be a program based upon the economic impact of federal installations. This conclusion is fortified by the fact that large cities (but not other P. L. 874 recipients) have been experiencing considerable difficulties in administering the student counts for the reasons described in detail in Chapter 5 of this report.

Current law requires at least ten federally connected students for a district to be eligible. This provision is dropped in the recommended program but its effect of avoiding very small payments to any district is achieved through the operation of a minimum payment provision in another section of the recommendations.

For a district just barely reaching the 3 percent minimum, current law creates a situation of full payment for all pupils but reverts to no payment for any pupils if the district drops below the minimum in any year. To avoid the effect of such sharp changes, Section 3(c)(2)(B) of P. L. 874 allows eligibility to districts not meeting the minimum requirement if the district met such requirements in a preceding fiscal year. Battelle's recommended program obviates any need for this type of transition because the federal payments would be based upon those pupils exceeding 3 percent of equivalent non-federal students. Thus a district on the borderline of being ineligible would be receiving only a small payment.

(B) No local educational agency shall be entitled to any payment under this Act for any fiscal year except upon application therefore, submitted through the State educational agency and filed in accordance with regulations of the Commissioner, which application gives adequate assurance that the local educational agency will submit such reports as the Commissioner may reasonably require to administer the provisions of this Act.

This recommendation is similar to Section 5(a) of the present legislation except that it broadens the Commissioner's authority to require reports necessary to determine what payment to make to the district and necessary to administer the provisions of the Act. This change reflects the fact that the Commissioner may, on occasion, need information from one school district to determine payments for another district.

(C) No local educational agency in any state shall be entitled to any payment under this Act:

(1) Unless such state makes available to all federally connected pupils residing within the state public elementary and secondary education under conditions that are substantially comparable with such education provided to other students in the state who are not federally connected; provided that for a period extending three years from the enactment of this Act, the Commissioner may waive the operation of this provision upon a finding that such state is undertaking reasonable steps toward coming into compliance with this provision. In the event of such waiver, the calculations of payments to districts within such state shall be governed by the provisions of Section 6(f) of Public Law 81-874, as amended, as those provisions were in effect upon January 1, 1970.

Section 6(f) of Public Law 81-874 provides:

If no tax revenues of a state or of any political subdivision of the State may be expended for the free public education of children who reside on any federal property within the State, or if no tax revenues of a State are allocated for the free public education of such children, then the property on which such children reside shall not be considered Federal property for the purposes of Sections 3 and 4 of this Act. If a local educational agency refuses for any other reason to provide in any fiscal year free public education for children who reside on federal property which is within the school district of that agency or which, in the determination of the Commissioner, would be within that school district if it were not federal property, there shall be deducted from any amount to which the local educational agency is otherwise entitled for that year under Section 3 or 4 an amount equal to (1) the amount (if any) by which the cost of the Commissioner of providing free public education for that year for each such child exceeds the local contribution rate of that agency for that year, multiplied by (2) the number of such children.

This section was intended to avoid the problem caused by states that have laws prohibiting the education of students living on federal property having certain (highly technical) legal characteristics. The main enforcement device of that section is the reduction of assistance to other districts claiming students from the same property.

The recommended provision seeks the same objective, but puts more teeth into the enforcement provision by making all districts in the state ineligible unless the state does make education available to all federally connected children. Both provisions are intended to prevent a situation in which a state passes a law prohibiting the provision of education to children living on certain types of federal property, thereby forcing the federal government to educate such children under Section 6 of P. L. 874 in schools managed by the military departments. Such a provision should be drafted to insure that impact aid is offered only in states that agree to assume responsibility for all pupils – federal and non-federal. Such a provision would tend to ensure that (1) states could not turn back educational responsibility for federally connected children to the federal government and (2) that states would provide education for federal pupils now attending the Section 6 schools.*

Battelle is not aware of any state that is not in compliance currently with Section 6(f) as the provision is currently being administered. However, Section 6 schools are now retained by the federal government in a number of states under circumstances where state reluctance to assume responsibility for the federal pupils is one of the factors causing continuation of the school. Other Battelle recommendations would ease (or remove) the financial hardships of state and local assumption of responsibility for pupils now educated in the Section 6 schools.

The purpose of a provision of the type indicated above would not extend beyond insuring that education was available to federal pupils on about the same basis as non-federal pupils; the provision should neither be drafted nor interpreted to terminate assistance in the event of educational problems (e.g., closing of schools due to financial problems in particular districts) that affect federal and non-federal children in a similar manner. The provision should include some transition clause that avoids a cut-off of assistance during a period in which a state is coming into compliance with the provision.

(2) If such state takes into consideration payments under this Act in determining the eligibility of any local educational agency in that State for State aid (as defined by regulation), or the amount of that aid with respect to free public education and does not make such aid available to local educational agencies in such a manner as to result in less State aid to any local educational agency which is eligible for payments under this Act than such local agency would receive if it were not so eligible.

This provision repeats the prohibition against taking federal payments into account to reduce state aid that was passed in P. L. 90-576.

The recommended program does not repeat the provisions of Section 5(d) of the current legislation which propose to reduce federal aid in those cases where states reduce per-pupil state aid payments. The need for such a provision is substantially eliminated by the prohibitions of the above language, and the remaining impact of the provision would be to prevent states from substituting general support of local governments (e.g., revenues sharing) for school aid. Such action may be fiscally sound in states where schools are administered by counties or municipalities but might be construed as a reduction of school aid. The magnitude of federal assistance involved does not justify this level of federal intervention in the fiscal policies of the states. That the provision of Section 5(d) could have unintended, perserse effects is indicated by the fact that the drafters of that section included a provision allowing the Commissioner to waive it.

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*In the case of this provision and others, the purpose of suggesting these provisions is to indicate specific directions for changes in current legislation. An actual piece of legislation would, of course, have to be drafted by the Office of Education in the event these recommendations were to be implemented.

(D) No local education agency shall be eligible for assistance under this Act for any fiscal year for which its tax base (estimated under regulations issued by the Commissioner) exceeds by 25 percent or more the estimated average tax base of the State in which it is located.

The theoretical basis for impact aid is that the federal government causes pupils to move into a district (increasing the district's educational costs) without causing a proportionate increase in the tax base of the district because of the non-taxability of the federal property upon which the parents live, work, or both. In some cases, the economic growth induced by the federal activity will generate more than enough tax base to pay for the costs of educating the federally connected pupils, in which case there is no need for impact aid, nor is there any justification for it. This provision is intended to reflect that principle. The provision also acts to deny assistance to affluent districts even where the affluence might not have been caused by the federal government, on the grounds that such a district can readily afford to pay for the education of all its pupils without federal aid.

The recommended cut-off point of 25 percent above state average is not sacrosanct. Arguments could be made that the cut-off should be at state average or substantially above it. Arguments can also be made for a higher cut-off point than 25 percent. The recommendation, in effect, allows the federal program to provide a somewhat better level of education in federally impacted districts than in the state average district, assuming that a district makes a reasonable tax effort.

Section 3: Assistance to Certain Heavily Impacted Districts

(A) The Commissioner shall provide assistance under this Section to any local educational agency which he determines will have, in the fiscal year for which such assistance is provided, a number of federal equivalent pupils in excess of one-half of all pupils in the district. Such local educational authorities shall not be eligible for assistance under Section 4 of this Act.

This section would establish a special category of districts comprised of all those districts where the federal responsibility – assuming that (b) students are 60 percent a local responsibility and 40 percent a federal responsibility – for education is greater than the local responsibility. In such districts the federal interest in education is a paramount one. To allow the formula of Section 4 to be applied to such districts would, in effect, be to allow the tail to wag the dog. This is particularly the case because the Section 4 formula would utilize the district's own tax rate to determine per pupil payments. In districts with practically no tax base (e.g., districts coterminous with military installations) such a formula could produce highly artifical results. This special section for these districts will allow the Commissioner (and thus the federal government) to provide funding for a reasonable standard of education in these districts without regard to the Section 4 formula.

The use of the "number" of students in the eligibility threshold for these districts is an intentional deviation from the average daily attendance method used elsewhere in the recommendations. In effect, it would permit the Commissioner to apply this section to certain districts educating primarily Indian children whose attendance is frequently substantially less than membership.

The districts involved tend to be of three types. First, and most significant, are those districts that are essentially coterminous with the boundaries of a military base but administered by a local educational agency. Such districts (e.g., Lackland AFB in Texas) are currently essentially without any tax base. Some of them also receive little state aid, but the Commissioner operating under this provision and that of Section 2 of the proposed legislation, should be in a position to improve the state aid treatment of such districts, particularly in those states that provide some equalization assistance.

The districts of the second category also have a major proportion of their students that live on federal property but in these cases tend to be large numbers of smaller districts in such states as Alaska, Montana, and Oklahoma that serve primarily Indian students. The third group of districts are those that operate in relatively small communities near military bases. Typically, such districts service military dependents living on base and the dependents of military and civilian base personnel who live off the base.

In all of these cases the federal influence is so predominant in the financial affairs of the school district as to make the existence of the district largely a federal responsibility. Providing some flexibility for the Commissioner in these cases will also facilitate special arrangements leading to the termination of responsibilities assumed by other agencies such as military departments in providing Section 6 schools, the Atomic Energy Commission in certain communities, and the Bureau of Indian Affairs.

Table 10.1, based upon 1967-68 applications, indicates the districts that would be involved in this section. Careful examination of the table will indicate that the negotiated payment recommendation will affect about 40 larger school districts and about 110 school districts that by national standards are quite small (ADA below 1,000 and in many cases below 100). The number of districts involved has probably shrunk since 1967-68 (the year these data represent) through consolidation of some of the smaller districts. This reduction could be expected to continue, thereby reducing the number of districts involved in the recommended negotiated payments.

It is of more than passing interest to note that the total ADA (federal and non-federal) in these heavily impacted districts is less than one percent of the ADA in all districts that get impact aid under the current program. Assuming that on the average these districts have 70 percent federal equivalent enrollment under the current program (counting the (b) students at 50 percent), the entitlements of these districts under the current program represent less than $40 million, or significantly less than 10 percent of entitlements of all eligible districts.

The Battelle-recommended program would tend to increase the number of districts in this negotiated category slightly by encouraging the transfer of Section 6 schools to local governments, but would tend to decrease the number of smaller districts involved by the operation of a provision discussed in connection with a subsequent section of the recommendations.*

The provision for negotiated payments for highly impacted districts is not new. Section 3(c)(4) of P.L. 874 permits such negotiations to increase payments to districts not adequately compensated by the current formula. This provision differs from that one in several respects. First, it broadens eligibility to permit the 50 percent impact level to be reached by counting (b) as well as (a) students, but at a 40 percent rate. Second, it operates to reduce federal budget costs as well as to increase them. The current provision operates only to increase entitlements but never to decrease them. The fact that the current Section 3(c)(4) payments are applied for by very few districts is a tribute to the generosity of other portions of the present formula.

The operation of the negotiated payments section would not apply to those districts that are ineligible for assistance under the provisions of Section 2 relating to districts with high tax base per pupil by comparison to state averages. The operation of that eligibility criterion may eliminate a few of the listed districts from eligiblity. More important, in considering the amount of payment, the Commissioner would be permitted to take into account school revenues for shared revenues under such programs as grazing and national forest legislation. It is probable that many of the smaller districts in the above listing receive substantial sums from such sources and thus would receive no additional federal funds through the negotiated rate. These districts normally would not apply for the negotiated payments.

(B) The assistance provided under this section shall be an amount which the Commissioner determines to be necessary to provide a reasonable standard free public education to the children in such local educational agency minus the amount which the Commissioner determined to be available from State, local, and other federal sources to such agency.

This provision says, in effect, that the federal government will guarantee the heavily impacted district a reasonable standard of education and will pay the difference between what such a program would

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*Basically that provision allows the states to keep the difference between one-half national average per pupil costs and the local contribution rate for all students where entitlement is based upon the national minimum rate. Even in such states, however, the national minimum would not apply to the negotiated payment districts. Thus, the states with high state aid – a category encompassing most of the smaller districts listed above – have a strong incentive to encourage the reorganization of these smaller districts into larger districts that would not be subject to the negotiated rate.

TABLE 10.1. DISTRICTS COVERED BY SECTION 3 (1967-68 DATA)

State	Students Affected, Approximate (Federal and Non-Federal)	Districts Affected, Approximate
Alaska	17,000	3 (primarily the State of Alaska's activities in Indian education
Arizona	16,000	28 (primarily small districts serving Indian students)
Arkansas	1,500	1 (Gosnell S.D. #6, Blytheville)
California	21,000	9 (primarily Travis, China Lake, Lemoore (Central U.S.D.) and Muroc U.S.D. (Edwards AFB)
Colorado	6,000	2 (El Paso Co. S.D. #6 (Fountain) and Air Academy S.D.)
Illinois	10,000	3 (Rantoul, North Chicago (Lake County), and Mascoutah)
Kansas	2,200	1 (Fort Leavenworth)
Maine	2,300	1 (Limestone)
Massachusetts	6,800	2 (Bourne and Ayer)
Michigan	9,000	3 (Rudyard, Oscoda, and Forsyth)
Minnesota	1,200	7 (primarily small districts serving Indian students)
Missouri	6,700	2 (Knob Noster Reorganized S.D. in Johnson County and Waynesville Reorg. S.D. Pulaski County)
Montana	5,800	23 (3,700 students in Glasgow and Browning, the remainder in small districts)
Nebraska	9,100	4 (8,500 in Bellevue (Offut AFB))
Nevada	1,800	1 (Mineral Co.)
New Jersey	10,500	3 (Pemberton Township, Browns Mills; Hanover Township, McGuire AFB; and Eatontown, Monmouth County.)
New Mexico	13,500	3 (Gallup-McKinley, Kirtland, Dulce)
North Dakota	1,000	8 (small Indian districts)
Oklahoma	2,100	12 (two-thirds in Burns Flat, the remainder in one or two room school districts with an average ADA of only 47 students per district)
Oregon	100	2
South Dakota	6,700	12 (70 percent in Todd Co. and Douglas (Ellsworth AFB) the remainder in small Indian districts)
Texas	4,700	5 (primarily Randolph AFB, Lackland AFB and Fort Sam Houston)
Washington	4,400	11 (2,000 ADA in Medical Lake)
Wyoming	900	4 (small Indian districts)
TOTAL	160,300	150 districts

Source: Battelle calculations.

159

cost and the funds the district has available from other sources. This approach differs substantially from the payment provisions in the other districts which require a pupil count, a calculation of eligible federal equivalent pupils, the development of a local contribution rate, and other comparable steps. In these districts student surveys would be required only in borderline eligibility cases; where the magnitude of the federal impact is obvious (e.g., all Indian schools and on-base schools) no pupil count would be required, no absorption would be calculated, and no local contribution rate would be calculated.

This provision covers capital costs as well as operating costs. It obviates the need for a P. L. 815 program in these districts and, unlike P. L. 815, does not require a district to show an increase in federally connected students, or total students, in order to receive building funds.

(C) In determining the amount necessary to provide a reasonable standard of free public education, the Commissioner shall consult with the local educational agency and the state educational agency and shall consider the standard of education of comparable school systems in the state and such systems in other states which the pupils in the local education agency may have attended or may in the future attend.

This provision provides a general standard for the Commissioner to use in determining a reasonable standard of education. The provision encourages the Commissioner to consider both comparable districts in the same state and other districts which the pupils might have attended or might attend in the future. In effect, this provision encourages the Commissioner in dealing with a school system in a state which has relatively low educational standards to adopt a higher national standard for those districts that educate primarily military dependents that are frequently transferred throughout the United States. Under this provision the Commissioner could, for example, approve the support of kindergarten programs even though such programs were not standard practice in the state in which the school district happened to be located.

Operationally this section would be administered by the submission of actual budgets by the school districts to the Commissioner. The Commissioner would have no authority to approve or change such budgets, but would use them in determining the total funds to be provided. Normally, we would expect that budgets would be approved relatively automatically by the Commissioner so long as they were not out of line with state or national average per pupil costs. Operating under this provision, the Commissioner would be in a position to consider extraordinary educational costs in certain of the districts covered by it. For example, in those districts serving remote areas, the commissioner could recognize the added costs of education imposed by high transportation costs.

(D) In determining the local funds available to the local educational agency the Commissioner shall consider the funds that would be raised if the local educational agency were to levy taxes at the average rate for the state, and the recipts available from other local sources.

This provision prevents the local taxpayer from shifting all the costs of a reasonable educational program to the federal government, and also permits a district to provide a somewhat higher level of education if it is willing to pay for it. For example, assume that the district's budget called for per pupil costs of $700 and the district convinced the Commissioner that that level of expenditures represented the level necessary for a reasonable standard of education. The impact aid program would pay to the district (for federal and non federal pupils) the difference between that amount and the amount available from state sources, say $300 per pupil and from local sources if the district levied the state average tax rate, say $150 per pupil. Thus, the federal payment would be an amount that would be equivalent to $250 per pupil.

The provision in subsection (D) would allow the district to raise its tax rate to, say, 33 percent above the state average rate and thereby raise its per pupil expenditures by $50 without reducing its federal aid. Alternatively the district might drop its expenditures by lowering its tax rate to below the state average rate, also without affecting its federal payment. In formulating these recommendations, Battelle considered a requirement that the district levy at least the state average tax rate in order to be eligible for assistance. We rejected this provision despite its obvious appeal on the theory that in the heavily impacted districts the majority of students are federally connected, but the voting power is concentrated in the hands of local residents, as the federally connected parents frequently will vote in some other state, particularly if they are military personnel. Considering this fact, the recommendations do not require a minimum levy and as a result they do not give small groups of local voters the power to deny education to the federally connected student in these heavily impacted districts.

The last clause in the provision relates to such nontax receipts as payments in lieu of taxes, fees, etc.

(E) In no case shall the current expenditures per pupil considered necessary to provide a reasonable standard of education be less than 85 percent of the greater of the estimated state average or national average current per pupil costs of elementary and secondary education, nor higher than 25 percent more than the greater of the estimated state or national average per pupil costs of such education.

The purpose of this provision is to limit the Commissioner's discretion in making payments to the heavily impacted districts. Despite the flexibility inherent in the determination of local contribution rates under the current program, Battelle has found no evidence of significant tinkering with such rates by the Office of Education for political reasons. Nonetheless, to reinforce the incentive to administer this provision fairly, it would seem desirable that both a minimum and maximum amount be established to limit the Commissioner's discretion in making payments. There is no particular magic in an 85 percent floor or a 25 percent ceiling, but these ranges are considered by Battelle to represent the range of reasonableness.

The use of both state and national averages in the floor provision means that the Commissioner will be required to support a level of educational expenditures in some heavily impacted districts in low-expenditure states that is above state average expenditures per pupil – this effect is intentional to reflect the fact that the concern with the education of federally connected pupils is a national concern. The inclusion of state averages in the maximum provision is primarily intended to reflect the higher costs of education incurred in Alaska. The flexibility provided by the 25 percent provision is likely to be applied primarily in the sparsely populated Indian districts. It will be noted that these minima and maxima apply only to operating costs.

(F) Notwithstanding the other provisions of this Act, the Commissioner may apply the provisions of this section to payments with respect to children whose education would have been paid for under Section 6 of P. L. 81-874 had a local education agency not assumed responsibility for such pupils after the effective date of this Act. The payments made under this provision shall only be made with respect to such pupils as would have been receiving education under the terms of Section 6 of that act if the local educational agency had not assumed responsibility for them. No payments may be made under this subsection after July 1, 1977.

This provision is one of several in the recommendations designed to facilitate the transfer of schools run by military departments to local educational agencies. It allows the Commissioner to guarantee a level of payments to local educational agencies in return for assuming responsibility for Section 6 schools even though such districts might not otherwise be eligible for payments under Section 3 of the proposed legislation. The provision will save federal funds in its operation, for the maximum cost of the payments will be approximately equal to the costs of continuing the Section 6 schools; but the federal government will find its cost reduced when the 1977 termination date arrives. The authority granted by this Section, it should be noted, is a discretionary one.

In concluding the discussion of the negotiated payment districts it should be noted that the overall impact of this section will be to reduce federal costs. While the federal government will tend to pay more to heavily impacted districts in many cases under this provision than under the current program (particularly if less than full entitlements are paid under the current program), the section in combination with the state aid subsections of Section 2 will reduce federal payments in many districts.

Many of the districts subject to the provisions of this section currently receive enough funds to maintain a level of educational expenditures higher than the Commissioner would approve if operating under this section. This is particularly the case when the district receives high state aid payments and also takes major federal payments through the operation of the floor payment rate of half national average per pupil costs. These districts in high state aid states would be likely to receive less under the proposed negotiated payment than they do at present. This is another way of saying that some of the districts that would be subjected to the negotiated payments are currently getting windfalls from the combination of state and federal payments which they would lose under the recommended program.

On the other hand the recommended program would cost more than the current program in some heavily impacted districts that receive relatively small proportions of their total expenditures from state aid. The capital cost payments would clearly exceed the costs that would be incurred under the present appropriation level of P. L. 815. In total we believe that the federal government is likely to save slightly by moving to negotiated payments for such districts.

The operating cost payments to this category should (and in many cases must) be made on a current basis. That is, when a recipient district is halfway through its school year it should have received half of its impact aid payments for that year. No explicit provision has been written to require this, as it can be done administratively, and certainly would normally be if an impact aid program substantially less controversial than the present one were enacted. Capital cost payments should normally be timed to match cash outflows (e.g., actual payments to contractors) but to conform to state and federal procedures for the incurring of obligations it may be necessary to make such payments to the districts in advance of all the cash outflow (in which case any interest the district might earn of the funds is deducted from the federal obligation to the district).

In administering this provision, the Commissioner would be expected to reach relatively firm decisions, subject to the availability of appropriations, on the amounts to be paid to each district at about the same time that the district is working out its own budgets. Thus, in the fall of 1970 and early part of 1971 most districts would be developing their 1971-72 budgets (and the Commissioner would be developing his fiscal 1972 budget). For the negotiated payment districts the planning and budgeting sequence would look somewhat as follows:

School Year 1971-72
Federal Fiscal Year 1972

Fall 1970	Submit preliminary budgets showing estimated total expenditures and estimates of sums available from local and state	Prepare fiscal 1972 budget request for Department and Bureau of the Budget
Jan.-Feb. 1971	Submit payment requests based upon estimated sums from state and local governments and expenditure detail as required	Notify districts of tentative approved level of federal payment
July 1971	Submit short form application	
August 1971		Make first quarter payment based upon short-form application
Nov. 1971		Second payment
Feb. 1972	Amend short form application if necessary to reflect changes in state aid or local receipts	Third payment
April 1972	File final application (any unanticipated receipts after this date would be deducted from the following years payments)	Fourth payment

Section 4: Amount of Assistance

The Commissioner shall provide assistance to any eligible local educational agency based upon the number of eligible federal pupils (provided that number is greater than five) times the payment rate.

(A) The number of eligible federal pupils shall be the number of federal equivalent pupils minus three percent of the non-federal equivalent pupils.

(B) The payment rate shall be the amount that would be raised per pupil by the local education agency by applying its own tax rates to the average tax base per pupil in the state in which it is located as estimated for the current year.

This provision sets the basic rate of payment per pupil by putting the state average tax base behind every eligible federal pupil and letting the district apply its own tax rate to that base. Thus, the formula automatically adjusts for local tax effort, causing the federal government to share a portion of the revenues raised from local voters levying increased taxes upon themselves, but letting the federal government benefit from any reductions in local tax rates. As indicated in the definition provisions later in these recommendations, the state average tax base per pupil would be the total state tax base of school districts divided by the total pupils in the state minus the eligible federal pupils claimed by districts in the state in the preceding year. In the first year of operation of the proposal, the eligible federal pupils would be those claimed by the preceding year under P. L. 874; for subsequent years they would be the pupils claimed under this proposed legislation.

For example, if the state average assessed value per pupil were $20,000, but 5 percent of the pupils in the state in the preceding year were federally connected (counting the (b) students at 40 percent) then the state average tax base would be $20,000 times 1.053 (100 divided by 95) or $21,060. If the district levied a tax rate of 20 mills the per pupil payment would be $421 per eligible federal pupil.

In states where districts utilize more than one tax source the aggregate of each major tax base would be used and the district's rate of tax on that source would be applied to the state average base.

In states without separate school taxes, the schools would be credited with the tax rate of the government providing funds for schools (e.g., a county or municipality) multiplied by a fraction, the numerator of which would be the local revenues of the local government expended for schools and the denominator would be the total local revenues expended for all purposes.

The tax rate of the district for the year in which assistance was being provided would be used in these calculations. These rates are normally set well in advance of the year and thus would be known in advance of filing the application. The tax base for the current year would be estimated by the states and approved by the Commissioner. Regulations would provide for special situations such as the change of a tax rate during the year.

The recommended provision uses the concept of absorption of 3 percent of equivalent non-federal pupils* in order to correct for the substantial overcounting of pupils inherent in the student count methods. As noted in an earlier chapter this absorption provision avoids the threshold problem inherent in having an eligibility criterion but no absorption. The concept has the effect of making the absorption negligible in a heavily impacted district but highly significant in a highly impacted one. To avoid small payments, no payments would be made unless the district had at least 5 eligible pupils.

(C) There shall be deducted from the amounts calculated under the preceding subsections the following:

(1) The amount of payments in lieu of taxes, taxes upon improvements, business personal and real property and possessory interests, and shared revenues and similar payments accruing to the local educational agency, directly or through any local government, from all federal property with respect to which any pupils are claimed by the local educational agency;

(2) Any contract-type payments made by any federal agency for the support of pupils provided public education by the educational agency with the exception of federal education legislation and the Johnson-O'Malley program. The Commissioner shall by regulation establish both an absolute amount and a percentage of total entitlement below which the deductions provided for in this section will be ignored, provided that no such regulation shall permit a local educational agency to receive more than 110 percent of the amount to which it would be entitled were deductions taken into account.

This provision is necessary to prevent double payments of the federal obligations to local educational authorities. Insofar as it applies to such payments as forest revenues, the provision returns to the original P. L. 874 concept of deductions which was repealed upon the stated theory that the provision was too difficult to administer.** At the time of repeal, deductions were in the neighborhood of $10 million, but the reduced federal costs from this provision would be greater now than at the time of repeal because some districts with large deductions did not apply for assistance at all until the deduction feature was removed from the law. In order to avoid spending federal administrative funds to chase down small deduction items the Commissioner is permitted to issue regulations that would ignore deductions until they reached 10 percent or more of entitlements.

The major innovation in this provision is its treatment of the tax payments made by major government contractors (e.g., aircraft companies) that operate plants owned by the federal government. The student count procedures allow the districts to count employees of such plants as persons working on federal property. The effect of allowing such students to be counted is to presume that the place of employment is tax exempt. In fact, these government contractors often make large tax payments through taxes on privately owned portions of such plants, machinery and equipment, inventories, and work in process and possessory interest taxes. This provision requires a district counting pupils from such a facility to allow the federal government credit for all of the payments of that type made by such facility to the applicant district.

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*Equivalent non-federal pupils is determined by taking the sum of non-federal connected pupils and 0.6 times the (b) pupils.

**Repeal of this provision favored significantly a small group of districts concentrated in a few Western States. The repeal served political as well as administrative purposes and does not indicate that the provision cannot be administered.

(D) The payment to any local education agency shall be the lesser of the amount calculated under subsections (A) (B) and (C) above and the amount necessary to provide the local educational agency, through a combination of its tax base and the tax base equivalent of the federal payment, the equivalent of a tax base per pupil that is 25 percent above the average per pupil tax base in the state.

The eligibility provisions prevent assistance to any district that is 25 percent better off than the average in tax base per pupil in the state. This provision merely ensures that the impact aid payment to an eligible district will not be so great that it would make an eligible district better off than an ineligible one. Although the provision sounds complicated, it can be handled by two lines on an application form. A sample form is provided in Appendix C to this report.

(E) The components of the local educational agency's tax rate used for the calculation of entitlements under this section shall include those portions of the tax rate as are related to capital costs such as the construction of school facilities. However, . . .

This provision accomplishes the merger of the current P. L. 815 with the current P. L. 874. The incomplete "however. . . " provision should be drafted to ensure that the federal government does not pay twice for facilities. This transition problem is discussed at length in Chapter 8 and the operation of the provision may be seen in the application form provided as Appendix C to this report. A provision should be drafted to allow prepayment of capital costs in certain special situations. The need for this provision and suggestions for it are also discussed in Chapter 8.

(F) No rate of payment calculated under this section shall exceed the Commissioner's estimate of national average per pupil operating costs for the year in which the payment is to be made, nor the total per pupil operating costs of the local educational agency in the preceding year.

This provision places a ceiling on the per pupil payment, indicating that the federal government should never need to pay for each federal pupil any more than the national average per pupil costs nor the total per pupil costs in the district receiving assistance. Because state governments bear a significant portion of education costs, the ceiling would normally affect only a few (if any) districts.

Section 5: Payments to Certain States

(A) Where the per pupil payment determined under Section 4 is less than one-half of the national average per pupil operating costs as estimated by the Commissioner for the current year, the State educational agency serving the local educational agency with such payment rate shall receive assistance calculated by multiplying the eligible federal pupils in such district by the difference between one-half the national average per pupil costs and the per pupil contribution to such local educational agency.

(B) In the event that the payments that would be made to any local educational agency under sections (A) and (B) of Section 4 are reduced through the operation of subsections (C) (D) or (F) of that section the payment to be made the state education agency with respect to such local educational agency shall be reduced by the proportion of the entitlements under subsections (A) and (B) of Section 4 that is not paid to such agency by virtue of the operations of subsections (C), (D) and (E) of Section 4.

This section handles the inequity of large payments in states with low state effort and low payments in states with high state effort by maintaining the half-national-average floor under payments, but directs the resulting funds to the jurisdiction that earned them, namely, the state. The half-national-average floor provision is moved to a current-year basis from the present provision of payment based upon 2 years preceding. The hard-to-read section (B) is simply a way of ensuring that no payment to a state is made on the basis of a pupil for whom no payment could be made to a district because of either the affluence of the district or coverage of the student's costs by other federal payments. The sample application form in Appendix C shows how this provision would operate in practice.

All states might receive assistance under this provision, as it would apply whenever the calculated local contribution rate of a district fell below one-half national average per pupil costs. This is most likely to happen when two situations coexist: high state aid as a fraction of total per pupil costs and low per pupil expenditures. Because state aid payments and per pupil costs vary substantially among districts within a state, it would be possible for states to receive these payments on a few districts even though the per pupil contribution of the federal government to most of the districts in the state would exceed the one-half national average per pupil costs.

It is important to understand the interaction of this formula with the state aid payments to districts receiving assistance. So long as the district's tax rate multiplied by the state average tax base results in more than half national average, increases in state aid would be paid (as they are today) 100 percent through state funds. As is the case today, the states would not be allowed to offset the federal payment in their state aid formulas. However, when a state increases state aid (or the state aid is already high), the district's own taxes and the federal payment to the local district will tend to be lower. Once the per pupil contribution of the federal government to the district falls below half national average through the operation of this provision, the state will tend to recoup all increases in its per pupil assistance with respect to eligible federal pupils through increases in the payment made under this section. In the extreme case, if the state chooses to pay all the costs of all children in a district, it would get these payments for each of the eligible federal pupils in that district.

(C) No payments shall be made to any state under this section unless that state provides assurances satisfactory to the Commissioner that the funds paid shall be used to finance elementary and secondary education in such state and that the proportion of such funds used for administrative costs of the state educational agency shall not exceed the proportion which such administrative costs represented of total educational expenditures in the state for the preceding year.

This provision is designed to ensure that the funds provided to the states are used for educational purposes. A restriction is placed on using the funds for administrative costs to ensure that the state pays out a large percentage of the funds to local educational agencies.

(D) The payments made under this section shall be reduced by an amount equal to the reduction (if any) in state funds utilized for elementary and secondary education between the second preceding and the immediately preceding year before the year in which such payments would be made. This subsection shall become effective one year from the enactment of this act.

This provision prevents the state from using the federal payment to reduce the state's own support of elementary and secondary education. For example, in fiscal 1972, the Commissioner would compare the fiscal 1971 state support of elementary and secondary education with the support provided in fiscal 1970. If the state had increased its own effort, or kept it constant, the provision would have no effect. However, if the state used the federal payment to reduce state costs in fiscal 1971, then the federal payment in fiscal 1972 would be reduced accordingly. Thus, the provision provides reasonable assurance that states will not use the federal payment to reduce their own efforts to support elementary and secondary education.

Section 6: Assistance in Special Cases

In addition to the payments authorized by other sections of this act, the Commissioner is authorized to make payments to local educational agencies, under such conditions as he may determine, upon a finding that the federal government has placed an unusual burden upon the schools of such agency and that that burden is not adequately compensated by the operation of the provisions of this act. Such assistance is authorized in the following cases, and in such other cases as the Commissioner may determine.

(A) Where the federal government has, since 1938, acquired property accounting for not less than 10 percent of the valuation of the local educational agency, provided that the assistance provided shall not exceed the amounts the Commissioner estimates the local educational agency would have received from such property minus the costs the Commissioner estimates the agency would have incurred to educate pupils that would reside on such property had it not been acquired by the federal government. Such assistance shall not be available to any local educational agency that, in the year in which it would receive such assistance, had a tax base per pupil equal to or in excess of the average tax base per pupil in the state in which it was located.

(B) Where a local educational agency makes reasonable preparation for an anticipated increase in federal enrollment and such enrollment does not develop by reason of action of the federal government, the Commissioner may make payments to such agency not greater than the difference between the costs incurred by such agency to meet such increase minus any reduction in current expenditures than the Commissioner finds the agency should have reasonably effectuated after learning that the anticipated increase would not occur. Such payments may only be made where the anticipated increase not materializing equals or exceeds five percent of the average daily attendance of the local agency.

(C) Where a local educational agency has experienced an increase of at least 10 percent of total average daily attendance in equivalent federal students as a result of a sudden increase in federal activity, the Commissioner may increase the assistance to which the district would otherwise be entitled by not more than 10 percent in any year in which such increase occurs. Such assistance shall not be available to any district in which the estimated tax base per pupil of the district is greater than the average tax base per pupil in the state.

(D) Where the limitations upon eligibility or the absorption requirements of this legislation, in the opinion of the Commissioner, would work undue hardship upon a local educational agency.

(E) Where a local educational agency that is eligible for assistance under Section 6 of this act desires to construct educational facilities primarily for the use of federally connected students, the Commissioner may, subject to reimbursement out of subsequent entitlements upon a scheduled agreement between the Commissioner and the applicant agency of not to exceed ten years, advance to such agency funds to defray all or part of such costs under the circumstances where the Commissioner determines that such facilities could not be constructed from normal state and local financial sources.

(F) There are hereby authorized to be appropriated such sums, not to exceed $25 million per year, as may be necessary for the purposes of this section.

This section replaces a variety of special assistance programs written into current legislation and the waiver authorities associated with that legislation. Generally, the provisions and limitation on appropriations will result in considerably less assistance under these provisions than under current law for several reasons. First, the Commissioner grants such assistance only at his discretion and only under circumstances where the funds are actually needed to meet the special impacts described. Second, such funds are not provided to districts that have apparently not had their per pupil tax base significantly impaired by the activities of the federal government.

An overall limitation on appropriations should be provided for the authority given to the Commissioner under this section, even if such a limitation is not provided on the appropriations for the regular portions of the legislation. Normally, the appropriations necessary for this section should be less than $25 million. Some examples of where such authority might be necessary include

(1) The special authority situations covered by separate sections under the current law (e.g., sudden increase, unanticipated decrease in enrollment)

(2) Extreme circumstances causing high costs (e.g., a very sparsely settled district with few roads, a remote Alaskan district) where the maximum payment provisions might work a hardship

(3) A heavy federal impact concentrated in a remote portion of a large district which, through the operation of eligibility and absorption, might be determined to be inequitably affected by the provisions of the recommendations

(4) Circumstances where the letter of the law results in violation of the spirit of the law (One good example of such a situation was found in New Mexico where in one district military personnel were living in military trailers located on taxable property of very low value. The present law, and the Battelle recommendations, would tend to count these students as living on taxable property when in fact the district cannot tax the valuable trailers, but can only tax the nearly valueless land.)

The provision in subsection (E) is one approach to the prepayment of capital costs discussed in Chapter 8 of the report.

Section 7: Authority for Advance Commitments in Certain Cases

(A) The Commissioner may make commitments, subject only to the availability of subsequent appropriations, that, notwithstanding the other provisions of this Act, provide for assistance at a predetermined level for a period not to exceed seven years, under the following circumstances:

(1) In the case of a local educational agency (and any state agency) that undertakes the responsibility of providing free public education to students whose education, on January 1, 1970, was provided for through the provisions of Section 6 of Public Law 81-874.

(2) Where the Commissioner finds that (1) two or more local educational agencies are considering consolidation or reorganization, (2) the payments to at least one of the local educational agencies represented a sum that would exceed one percent of the likely operating budget of the reorganized or consolidated entity, and (3) that such consolidation or reorganization would ultimately reduce federal costs incurred under the provision of this Act.

(B) Such commitments may be made upon such terms and conditions as the Commissioner shall determine, but in no case shall provide for more assistance than would have been payable under this Act or under the provisions of Section 6 of P. L. 81-874 as they existed on January 1, 1970, in the absence of a consolidation or reorganization or the transfer of responsibility for education of children covered by Section 6 of P. L. 81-874.

(C) The authority conferred to this section may not be delegated.

This section is intended to permit the Commissioner personally to make commitments, subject to the availability of appropriations, under circumstances where such commitments would facilitate the transfer of responsibility of Section 6 schools from the hands of the military departments to civilian educational authorities or where without such commitments the normal pace of reorganization and consolidation would be retarded.

The operation of this section, in addition to achieving the above objectives, will tend to reduce the costs of the impact aid program. Under Section 6 of P. L. 874 the federal government must pay the full per pupil costs of operating schools on military installations. If such schools were managed by local educational authorities, they would be eligible for state aid, and thus the costs of federal payments would be reduced. In some cases local educational agencies will assume responsibility for Section 6 schools without the need to use the special incentive provided by this section. In other cases, states or local authorities do not want to bear the costs of taking over such schools but would have, ultimately, to assume such responsibility through the operation of Section 2(C) of these recommendations. The operation of the provision proposed above would allow the Commissioner to ease the transiton to civilian control and decreased federal funding.

When a very heavily impacted district (such as an Indian district serving less than 100 pupils) is consolidated with a larger district with a smaller percentage of federal pupils the effect may occasionally be to produce the potential for a sharp drop in federal payments. To keep the program from being a factor in discouraging such consolidations, the Commissioner would be authorized to make the same payments he would have made had the districts not consolidated. By making commitments of this type the federal government can avoid discouraging the consolidations that, through the operation of the absorption provisions, would tend in the long run to decrease federal costs.

Section 8: Children for Whom Local Agencies Are Unable to Provide Education

(This section should repeat the authorities conferred by Section 6 of P. L. 81-874 with the exception of subsection (f), which is covered by another section of the recommendations, and the "Quantico Amendment" described below. The following subsections should be added to the section.)

(G) The Commissioner shall initiate discussions with the appropriate local educational agencies and State educational agencies to the end of terminating payments under this section not later than July 1, 1972, for education of federally connected pupils within the Continental United States, Hawaii, and Alaska. The Commissioner shall report to the President and the Congress no later than July 1, 1971, and again before July 1, 1972, on the steps taken to implement this subsection.

(H) Insofar as it applies to education provided within the Continental United States, Alaska, and Hawaii, this section expires on July 1, 1972.

Section G of P. L. 874 and the comparable section of P. L. 815 permit the Commissioner of Education to provide capital and operating costs for schools operated directly by federal agencies, rather than by local educational agencies (and by local education agencies in unusual circumstances). Funds are also provided in special cases for certain components of educational costs, such as transportation from a base to local schools. Expenditures under Section G approximate $30 million annually primarily for operation of such schools as that at Dover Air Force Base (managed by a local educational agency), Delaware; Tyndall Air Force Base, Florida; Fort Benning, Fort Stewart and Robins Air Force Base, Georgia; Fort Knox and Fort Campbell, Kentucky; England Air Force Base, Louisiana; Hanscom Field, Massachusetts (managed by a local educational agency); U. S. Military Academy, New York; Fort Bragg and Camp LeJeune, North Carolina; and the Quantico Marine Corps schools in Virginia. Smaller expenditures are made under the section that are channelled through local educational agencies and the program also is used outside of the Continental United States.

Although it has been "policy" for years to close down such schools and let responsibility for education of federal pupils fall directly into the hands of local and state educational agencies, very little progress has been made in achieving this objective. The military departments have been opposed to termination of particular schools for reasons of tradition, desire to maintain control over dependents' education, or a feeling that better quality education could be obtained through a federally administered program than through more normal arrangements for dependents' education.

Current legislation allows the establishment of such schools if either no tax revenues of the State or any political subdivision can be expended to educate the federally connected children, or no local educational agency is able to provide "suitable" free public education for the children involved. These qualifications have not been pursued in practice because a portion of Section 6 provides:

> In any case where education was being provided on January 1, 1955, or thereafter under an arrangement made under this subsection for children residing on an Army, Navy (including the Marine Corps), or Air Force installation, it shall be presumed, for the purposes of this subsection, that no local educational agency is able to provide suitable free public education for the children residing on such installation, until the Commissioner and the Secretary of the military department concerned jointly determine, after consultation with the appropriate State educational agency, that a local educational agency is able to do so.

This "Quantico Amendment" was designed to allow the military departments to block termination of military schools when the Commissioner found that such schools were no longer necessary. It has served its intended purpose well. The "Quantico Amendment" is not included in the proposed legislation as it has simply served as a barrier to turning over school responsibilities to state and local authorities.

Other portions of the proposed legislation strengthen considerably the responsibilities of any state receiving impact aid assistance to provide adequate education for dependents of federal employees. In addition, other subsections of this section and other sections strengthen the Commissioner in making arrangements to finance the turnover of Section 6 schools to local educational agencies. These changes should eliminate any remaining real barriers to the elimination of the Section 6 schools within the Continental United States. Further, the overall changes in the legislation will remove one barrier to local acceptance of responsibilities for such schools, namely inadequacies in the payments under P. L. 874 for some of the heavily impacted school districts.

Subsection (H) is new. It is designed to ensure the termination of the military schools within the next two years. If for any reason actions are not taken to achieve this objective, the Commissioner would be required to explain the circumstances to the Congress in order to achieve a legislative extension of this expiration date.

There are a number of significant reasons for encouraging the termination of the Section 6 schools. First, policy pronouncements by all concerned recognize the desirability of terminating such arrangements when suitable arrangements can be made by local educational authorities. Even if such policies were not widely endorsed, they should be. Direct operation of elementary and secondary schools by military departments is foreign to American standards of local control over educational policies and the separation of military and civilian authority. Second, the Section 6 schools represent an inconsistent approach to education of federal dependents. If local governments are really unsuited to providing reasonable education for military dependents, then the entire concept of impact aid in heavily impacted districts is incorrect. Instead of providing impact aid to such districts, the federal government should run the schools. However, if the capability of local education authorities to provide education is recognized, then it should be recognized in all cases. Third, continuation of Section 6 schools in some instances might make sense under the current P. L. 874 program because of the difficulties that heavily impacted districts encounter under the program. However, the program recommended by Battelle would avoid many of these difficulties and thus provide a better alternative to continuation of the Section 6 schools.

Current legislation provides for separate consideration and ground rules to determine the operations and financing of Section 6 schools outside the Continental United States, Alaska, and Hawaii. Because of the disparities between the educational systems of territories and possessions and those of the fifty states, the continuation of Section 6 authority seems reasonable for these situations. It would seem reasonable, however, to fund such dependents' schools through regular military department appropriations in the same manner that U. S. dependents' schools abroad are financed.

Section 9: Administrative Provisions

Current legislation provides a variety of administrative authorities that would be continued substantially without change in any new legislation. These include:

(A) Section 4(e) relating to consultations with affected educational agencies by the Commissioner before making decisions affecting them. The military departments should be added to this provision in the case of Commissioner decisions affecting the Section 6 schools.

(B) Section 5(b) relating to adjustments in a subsequent year for overpayments or underpayments in a prior year. Under the recommended program adjustments should continue to be made in circumstances that reflect significant misrepresentations by any applicant (e.g., a misrepresentation of student counts or tax rate for the districts receiving assistance under Section 4 and of local funds available or state aid for the districts receiving assistance under Section 3), but the federal government should apply to itself the same disregarding of de minimus problems recognized by the provision in Section 4 that payments only be made to districts having at least five eligible pupils. This is particularly important under the recommended program because this program must use estimates of current data in order to bring the per pupil contribution to a current basis. Below a certain threshold (expressed as a dollar amount, and/or a percentage of the affected entitlement) the Commissioner should be allowed to forgive small overpayments and to avoid collecting underpayments from a previous year.

(C) The provisions relating to the determination of payment rates in special situations where the local educational agency is a state and for determination of payments in territories and possessions.

(D) The general administrative provisions of Title III of Public Law 874 relating to issuance of regulations, annual reports, use of services of other agencies, prohibition against federal interference in local educational policies, and the prohibition of use of appropriations of other departments and agencies for the employment of teaching personnel for the provisions of free public education. This prohibition contains an exception for Bureau of Indian Affairs payments under the Johnson-O'Malley Act which should be continued as the Johnson-O'Malley funds are utilized to offset some of the very real special costs of Indian education. On the other hand, the exception for the Atomic Energy Commission schools in such communities as Oak Ridge and Los Alamos merits reconsideration. As such communities evolve in the direction of becoming less like "company towns" it would seem appropriate to replace Atomic Energy funds with impact aid payments. The exception for the Commissions's school payments should be continued, for the Commissioner of Education should initiate negotiations to transfer responsibility for such school systems from the Atomic Energy Commission to the Office of Education.

(E) A provision authorizing appropriations will be necessary, but the current language of Section 5(c) (relating to proration of payments when appropriations are insufficient to pay full entitlements) should be dropped. In its place there should be a provision giving first call on appropriations to meeting the commitments made by the Commissioner pursuant to Section 7 of this proposal (turnovers of Section 6 schools and special consolidation situations) and stating:

...In the event that appropriations made pursuant to this Act for a fiscal year are insufficient to pay all of the entitlements of all state and local educational agencies under this Act, such unpaid sums shall be paid out of such sums as are appropriated for the next fiscal year.

Because of a widespread impression that the current impact aid program overpays many school districts (which it does) and because of wide differences between Presidential budgets and full entitlements, a situation seems to be developing in which it becomes acceptable to pay less than full entitlements under P. L. 874. Unfortunately, this method, does not reduce payments enough in the districts that receive excessive payments in relation to the burden of federal installations upon them, and cuts payments too much in the very heavily impacted districts. Payment of less than full entitlements is an extremely crude tool for trying to improve the impact aid program and has strong adverse side effects upon local districts trying to follow reasonable budgeting and administrative procedures.

By contrast, the recommended program takes great pains to avoid all significant cases of overpayments, double payments and windfall gains through impact aid and concentrates assistance in the places where the federal impact is greatest. Paying less than full entitlements under the recommended program would clearly have significant adverse educational consequences and, depending upon the notice given to local educational agencies, could result in significant numbers of school closings. To avoid such situations, we recommend a mechanism, like that above, designed to ensure that full entitlements will be paid.

Section 10: Transition Provisions and Related Problems

To accomplish the transition from the present program to that recommended by Battelle, a number of transition provisions would be required to handle such situations as continued authority to complete projects begun under P. L. 815, to settle overpayments and underpayments from P. L. 874, and similar purposes. Also, the provisions of P. L. 874 and P. L. 815 relating to major disasters would be retained in some form, although appropriations for this purpose should be separated from impact aid.

In connection with transition, Battelle has carefully considered the recommendations of many superintendents that our proposal provides for a gradual phase-down of assistance for those districts that would be adversely affected by the recommended impact-aid program by comparison to P. L. 874. Whether such provisions may be politically necessary is a question beyond the scope of this report.

In economic terms, such transition provisions adopt the principle that districts that have been overpaid in the past (in relation to the program recommended in this report) have more right to overpayments in the future than do districts that have been underpaid in the past or not paid at all. It can be argued that overpayments in the past should give rise to underpayments in the future, but there seems no logic to justify compounding excess payments with more such payments.

A major proportion of the reduction in cost from moving from the present program to the recommended program occurs through the operation of the new eligibility threshold and absorption of 3 percent of non-federal ADA. Both these provisions cause the largest percentage reduction in entitlements in the district with the least federal impact, and thus with a low percentage of total budget coming from impact aid. Some of these districts are hard pressed financially, others are not; in generaly they are no more likely to be hard pressed financially than non-impacted districts. Assuming that the costs of transition aid for these districts would be paid out of funds that otherwise would be used for federal education programs reaching all districts (including those whose impact aid would be reduced), transition assistance to these districts would not appear desirable. In these districts the change in impact aid entitlement will be a small portion of total expenditures. For example, the situation below represents the worst possible case of impact of the new eligibility provision – a case where the district's entitlement would drop to zero from a position at the new eligibility threshold. The example uses national averages to derive the percentage of the budget that would be effected by the recommendations:

	Before	After
Total ADA	1,000	1,000
3(b) ADA	75	75
Equivalent fed. pupils	37.5	30
Eligible	Yes	No
Payment at $317 per equivalent federal pupil	$ 11,500	None
Total budget at $600 per student	$600,000	
Budget after impact-aid cut		$588,500
Percentage reduction in budget		1.9
Per pupil reduction		$ 11.50

Because this example does represent a "worst" case it will substantially overstate the impact of the recommendations on most of the districts that are affected by the eligibility and absorption provisions.

While the adjustments required in the many districts affected by the eligibility and absorption provisions will normally be a minor portion of the total district budget, some major budget effects will occur in certain districts. This will particularly be the case in the districts receiving double payments, the districts that have above average wealth per pupil and the districts receiving much larger payments per federal pupil than they raise per local pupil by virtue of the one-half national average provisions. Many of the districts affected through these situations will have to raise taxes or reduce the level of expenditures per pupil in their district as a result of the proposed changes. In our opinion, there is nothing wrong with this result.* These districts are those in which overpayments by the federal government allow some combination of (a) lower than average tax rates and (b) higher-than-average expenditures.

The third group of districts affected by the recommendations will be the moderately impacted districts that would not gain as much by the new local contribution rate formula as they would lose from the absorption formula. The effect of the shift in these two formulas will be most severe in the districts with very low tax rates. Under the proposed formula, these districts can increase tax rates, and will find that their increased tax rates will bring in more funds from both the federal government under the formula and from local taxpayers.

In short, the types of adjustments to be made by those districts that have, in our opinion, been overpaid in the past would not normally justify their being overpaid in the future.

One exception to the above comment results from the fact that under the laws of many states, some districts may not have enough time to adjust their educational spending or tax rates easily to the first year of implementation of the recommendations. For example, in the winter of 1969-70 many districts are planning their budgets and tax rates for the 1970-71 school year. If, for example, the recommended program were proposed in early 1970 for enactment effective with the fiscal 1971 budget, the districts would have the problem of guessing at whether the recommended program would be adopted; and whether adoption would involve some major changes affecting their district. Because these issues would likely still be in doubt in the spring of 1970 (or the spring of any other year in which major changes would be proposed), the district would have to set many of its educational costs (e.g., by setting the number of teachers to whom contracts would be offered and their rate of compensation) and tax rates (which in many states must be set far in advance of collection of revenues) before knowing the outcome of the Congressional Consideration of the recommendations.** If such a district planned on the basis of the presentprogram being continued, out a new one were adopted, it might find itself in a serious situation in 1970-71 even though it could readily compensate for the change in the following year.

A special transition payment might be made during the first year of a new program to deal with these situations. However, such payments, if made, should be severely restricted. First, they should be made only in cases where the difference between the districts entitlement under P. L. 874 (assuming 90 percent of entitlement were paid) and the entitlement under the new program would be at least 2 percent of the district's total gudget. Second, they should only be made with respect to that portion of the difference that exceeded 2 percent of the district's budget. Third, the special transition payment should be treated as an advance on subsequent years' entitlements and recouped from those entitlements over a period of, say, 5 years. Of course, they could not be recouped from those districts that would not be eligible under the recommended program.

Fourth, and most important, they should be made only if a district could demonstrate to the Commissioner's satisfaction that the payment was in fact expected in the fiscal year in which the program was first adopted. Because of traditionally late payments under P. L. 874 and uncertainty, about whether it would be fully funded, many of the richer districts have been fully able to shift the receipts from one fiscal year's impact aid to the subsequent fiscal year in their school budget.*** For example, one district in the suburban Washington, D. C., area is budgeting the fiscal 1970 P. L. 874 payment in its 1970-71 budget, rather than in the 1969-70 budget. In such a case a reduction in the current year impact aid entitlement does not affect the district's current-year budget planning or educational program. Such districts would have ample time to adjust to reduced impact-aid payments without the need for any transition assistance.

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*Under our assumption of constant federal spending for education, the funds not being spent to reduce taxes or increase expenditures in these districts will be in use to reduce taxes or increase expenditures in other districts through the operation of whatever federal program gets to "spend" the "savings" from the recommended impact aid program.

**This analysis is based upon the reasonable assumption that a program based upon the recommendations of this report might give rise to some controversy.

***Because many of the heavily impacted districts have not been able to do this, they are the most adversely affected by payment of less than full entitlements under the current program.

For those reasons, delaying the effective date of new legislation would not necessarily be the best approach to the transition problem.

Section 11: Definitions

The definitions section of the recommended program should provide for the following types of changes from present law.

Federal Property. The definition of federal property should continue as at present, with the following changes. The definition should eliminate tax-exempt uses of property (such as roads) that happen to be located on federal lands. The definition should eliminate two inclusions from current law, namely, property sold by the federal government for the fiscal year following the year in which it is sold and flight training schools providing contractual services to the Air Force and located at airports owned by states or political subdivisions of states. The former inclusion can provide unnecessary windfalls to districts in states that have assessment procedures that would allow the property to be taxed through its new private owner at the same time that the government makes impact aid payments on the theory that the property can't be taxed. In states that have a built-in lag in putting recently sold property on the tax rolls, the political subdivisions tend to lose when the federal government sells property, but to gain when *the federal government* buys property. There is no reason to reward the districts in one of these cases and allow state law to provide windfalls in the others. In any case if delay in assessment is a problem in some states, that problem should be solved directly, not through impact aid programs.

The definition should retain current exclusions for postal property and for low-rent housing for reasons discussed in detail in other chapters of this report.

Pupil. This term should continue to include any person for whom the applicant provides public education without tuition charges, except that such term should not include persons receiving public education in adult or continuing education programs provided primarily for the use of persons aged 21 and over nor should it include any education provided beyond grade 12. The term should exclude pupils in any program provided solely for federally connected pupils merely by reason of their federal connection.

The definition should liberalize current definitions by permitting a local educational agency to obtain reimbursement for programs (such as preschool programs) provided by that agency but not by other local educational agencies in the same state.

Average daily attendance (ADA) appears a reasonable concept for the pupil counts and should continue to be used. However, any state should be given the privilege of adopting another method (e.g., average daily membership (ADM). Moving from ADA to ADM would allow more pupils to be counted but would proportionately reduce the per pupil payment by increasing the denominator when state average assessed value is calculated.

Tax Rate and Tax Base. These terms must, to be consistent with the proposed program's logic, refer to "real" rather than "nominal" tax rates and tax bases. For example, if a district levies a tax rate of 20 mills on property that is assessed at 50 percent of true value, its real tax rate is not 20 mills but 10 mills. Likewise, if a state average assessed value per pupil is $15,000 but the average assessment ratio is only 33 percent, the real tax base is $45,000. The definition of tax base and tax rate should permit the Commissioner to establish interpretations through regulations. While, as indicated in Appendix B, there are some administrative problems associated with using measures of tax base, the gains in equity from using such measures far outweigh any inequities that might be introduced as overpayments or underpayments through use of these measures. The best proof that such measures can be administered is the fact that they are used in the state aid formulas of many states.

Either through regulations or through the eligibility provisions of Section 2, a state certification of assessment ratios (for adjusted assessed value) should be required. In a few states, assessment ratios have been nearly equalized, in which case the commissioner can use the "nominal" tax rates and tax base in the formula without the necessity for adjustment. In any state unable to provide assessment ratio data or its equivalent the Commissioner could use the nominal values. Battelle is not aware of any case in which such action would be required, but if it were, there would be incentive for the state to begin to provide some indications of assessment ratios.

THE PROBLEM OF THE FLOATING PARAMETERS

The preceding section has explained at length a recommended program of impact aid that, if enacted, would represent a substantial improvement over the present program for the variety of reasons explained throughout this report. To present a complete program, Battelle has assigned values to certain parameters that determine which districts are eligible and what payments should be. Examples of these parameters are the rate of payment for the (b) pupils, the percentage of non-federal pupils to be absorbed, the richness cut-off, and the minimum payment rate. These values are critical to the cost of the program and (the other side of the same coin) the amount of assistance it provides.

These parameters are of two types: research-based and judgment-based. In a few cases they represent a mixture of the two types. This distinction is important because the weight which should be accorded to the Battelle recommendations differs substantially depending upon which type of parameter is under consideration. The research-based parameters are based upon some type of research finding which is reported in this report. Because the Battelle staff members have had considerable opportunity to examine these parameters from a position that includes no vested interests in higher or lower payments to districts nor lower or higher federal spending on impact aid, the Battelle recommendations on the research based-parameters should, we believe, carry some weight.

In the case of the judgment-based parameters, however, the situation is quite different. In these cases Battelle's research has not (and Battelle has concluded that no amount of research could) led to precise values and there is no strong reason to assume that the parameters used in the preceding recommendations are substantially better than others that might be adopted.

The Research-Based Parameters

The 3 percent eligibility and absorption provision is based upon the concept of paying only for above-average federal impact. This concept and the resulting calculation of 3 percent is research-based. The payment rate of 40 percent for (b) pupils and the use of the concept of 40 percent federal responsibility for such pupils is also research-based. However, the research upon which it is based is basically valid only in ranges of 5 percent. In other words, we are confident that the rate should be 40 percent rather than 45 percent or 35 percent for all (b) pupils considered together but are not prepared to defend a 40 percent rate against a contention that the rate should be 41 percent or 39 percent. The decision to treat military dependent (b) pupils the same as civilian dependent (b) pupils gave some weight to the administrative convenience of the same rate for both groups and, on the basis of incomplete evidence, cancelled the effects of lower than average per pupil costs of the military dependents (who are concentrated in the lower cost grades) with the lower than average economic stimulus of the military families (who pay less taxes to the jurisdictions in which they live due to the Soldiers and Sailors Civil Relief Act and stimulate local economies less because of the PX and commissary systems).

The threshold for eligibility for the negotiated payment provisions of 50 percent of ADA as equivalent federal impact was based upon the notion that where the federal interest in predominant in the district the federal government could no longer let the local tax rate control the federal payments, but rather should guarantee a minimum standard of education. It could, however, be argued that this federal responsibility should begin when one-half of the students (counting the (b) at 100 percent) are federally connected, rather than when one-half of the federal equivalent students (counting the (b)s at 40 percent) are federally connected or at any point between those two points.

Basing the per pupil federal contribution on the tax rate of the district and applying that rate to the state average tax base is a research-based conclusion (the most likely tax base in the event of no federal impact) but could be varied on the assumption that the federal government as a matter of policy ought to provide a somewhat higher standard than state average in order to reflect the federal government's interest in a higher than average standard of education for "its" students.

The Judgment-Based Parameters

The most important judgment-based parameter - one to which the costs of the program are highly sensitive - is the minimum payment provision. This provision was, in the recommendations, set at one-half the national average per pupil operating costs in the year for which the payment is to be made. The current provision sets this minimum at half national average per pupil operating costs 2 years previous. Because the purpose of the provision is equalization among states, it can be argued that the minimum should be set so high that the average per pupil contribution in every state should be the same - in which case the minimum payment would be the national average per pupil costs. On the other hand, it can be argued that the desire for interstate equalization is satisfied by the current formula, and that therefore the minimum should be kept at a level of one-half national average of per pupil costs 2 years preceding the payment.* Obviously a large number of possibilities lie between these two extremes. Determination of this parameter involves a trade-off between the desire for additional equalization among states and a desire to avoid higher program costs.

The second major judgment parameter involves the richness cut-off, which in the recommended program is set at 1.25 times state average assessed value per pupil. The trade-off here is between the risk of undercompensation of net burden on rich districts whose richness was not caused by the federal government, and higher program costs. This parameter could have been set as low as 1.0 times state average. Or it could be eliminated entirely, thereby letting any district receive funds regardless of its wealth.

The other significant judgment parameter involves the minimum and maximum payment levels to the negotiated payment districts.

Dealing with these three parameters will inherently involve judgments. No amount of research would ever be able to indicate a single correct parameter.

THE NEED FOR FURTHER STUDY

It is customary at the end of any research report to emphasize the large quantities of additional research necessary before action may be taken on any important subject. These conclusions stem necessarily from a researcher's understanding that he can never exhaust all the nooks and crannies of any subject he might study or the researcher's fear that his recommendations might actually be adopted without further review by him.

To some extent those principles apply to this report. The Battelle team would have liked to have consulted with more school personnel than were visited in this study. We would have liked to have talked to state education officials in all the states rather than half of them. We would have liked to have traced down and documented every single example of underpayment and double payments under the current program. We definitely would have liked to probe more deeply into the state of Indian education and what might be done about it. We would have liked to perfect the financial data provided by states and districts to the point where precise calculations of entitlements for states and districts would be made for every possible combination of student counts, local contribution rates, deductions, absorption, and cut-offs of rich districts. Despite these understandable desires to do more of everything, however, we do not recommend further study in the case of the current impact aid program.

Naturally, the districts and states that would be affected by the recommended program and the various representatives of the people who are forced to pass upon those recommendations will want to review them in detail. However, we are doubtful if further study would yield conclusions strikingly different from those recommended here.

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*The minimum could even be set at zero.

The costs of delay in changes in impact aid are substantial - particularly so long as delay means continued fights in the Congress, uncertainty and confusion about the program in the districts and, most important, continued overpayments in many districts and underpayments in others. We are quite certain that the costs of delay exceed any possible benefits from postponing actions and therefore do not recommend continuation of examination of the impact aid program to the detriment of immediate action to improve that program.

APPENDIX A: COMMENTS OF SCHOOL OFFICIALS ON IMPACT AID

Battelle's questionnaire, a copy of which will be found at the end of this appendix, was used both as a method to acquire financial data and as a way to determine what local education officials thought of the current impact aid program. This appendix reports some of the highlights of the analysis of the questionnaire responses.*

In general, there is considerable satisfaction with the current P. L. 874 program on the part of those who benefit from it. Only 12 percent of the respondents indicated dissatisfaction with the program.** On the other hand some 35 percent of the respondents feel that they are undercompensated by the current impact aid formula. There is general acceptance of the role that the states play in administration of impact aid, though 20 percent of the respondents indicated that the states should be involved less than they are now or not at all. The majority of respondents (59.4 percent) feel that if Congress did not appropriate enough funds to pay full P. L. 874 entitlements that each system's entitlement should be reduced by the same percentage. By contrast 15.3 percent preferred a priority for systems with a low per pupil tax base; 9.7 percent indicated that priority should be based on 3(a) students and 8.6 percent indicated a preference for priority to districts that get a high percentage of their total budgets from impact aid. The remainder had no opinion or suggested other priority systems.

All P. L. 874 recipients were asked if they thought the present P. L. 815 eligibility provisions made it too difficult to qualify for assistance. Some 54 percent replied that it was too hard to qualify, a 32 percent said that the qualification requirements were about right. A special questionnaire for P. L. 815 recipients indicated general satisfaction with the administration of that program. About 39 percent of the respondents to this questionnaire indicated that they were undercompensated by P. L. 815, about the same percentage that felt they were undercompensated by P. L. 874.

Comments on P. L. 874

Many of the superintendents made additional comments about P. L. 874 and P. L. 815 on the questionnaires. Many of these comments told about problems with the present programs. Many praised the present programs. There were many recommendations on how the administration of the laws could be improved or how the formula might be changed. Table A.1 shows a summary of responses about P. L. 874. The most talked about problems were the uncertainty of the program and the timing of the payments. There were also many problems arising from the way the program is administered and the conducting of the student surveys. There was much dissatisfaction with the present formula. This can be seen by the large number of changes that were recommended both in the formula and in the method of making the student surveys.

The uncertainty of the P. L. 874 funds causes very severe problems for many superintendents. They find it impossible to make any sort of a budget without knowing in advance if they will get any funds from P. L. 874 and how much they will receive. One hundred and thirty-one of the superintendents who mentioned this problem stressed the need for the program to be fully funded. One fourth of these stressed that P. L. 874 must be made more permanent and cover a longer span of years. Forty-one superintendents felt that if full entitlements were not paid, they should know the rate and percent of financing well in advance of the school year so that they could prepare their school budgets. A number of respondents mentioned the inconvenience of having to go to Washington every year and fight for the funding of P.L. 874. The typical respondent in this group stressed the fact that it was an obligation of the federal government to pay for the schooling of these pupils, that the federal government had recognized its obligation when it enacted this legislation, and that the school districts therefore had a right to these

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*Battelle has turned over to the Office of Education a complete card deck on all the questionnaire responses. There is enough material in those cards to provide the data base for at least a dozen good doctoral dissertations on the impact aid program. Students of educational administration might find impact aid to be a useful dissertation topic, and in the process could add to public understanding of the program and its consequences.

**Percentages in the text relate to the percentage of those answering a particular question. This number is approximately 3,000 in all cases.

TABLE A.1. ANALYSIS OF OPEN-ENDED RESPONSES ABOUT P. L. 874

Type of Comment	Number Responding
Problems arising from uncertainty of program	360
Problems related to timing of payments	153
Problems with student survey and suggested improvements	73
Comments about undercompensation of payments	173
Problems with administration of the program	45
Other problems	16
Other comments about administration of the program	16
Praise of the program	90
Stressing importance of the program to the district	145
Recommended changes in the formula	262
Other comments	25
TOTAL	1,358[a]

(a) This figure is not the total number of superintendents who made comments. Many made comments which fall in more than one of the above categories.

Source: Questionnaire for Recipients of School Assistance to Federally Affected Areas.

funds. Many expressed opinions similar to this comment made by a superintendent in Oregon, "I can't understand how a government can spend $35,000,000 on a plane or $55,000,000 on one submarine and be so stingy with school aid which under the present formula is paying only 1/3 to 1/2 to actual student cost. It makes one realize that this country is rotten to the core and will fall like an overripe apple one of these days. How can you teach kids in school to respect a government which raises the pay of its legislative and judicial people each more than it would cost to help educate dozens of kids in school?"

The next most talked about problem was that of the timing of the payments. The following comment by a superintendent in Texas is typical of many of this type of comment: "We have the student load starting September 1 each year. Due to this we have to buy all supplies and instructional equipment. We have to pay for this immediately and the 874 money is delayed several months and sometimes only part of it is paid. When Congress has approved it for payment, then the Budget Bureau holds up payment. This is wrong and not fair to the schools."

Thirty-seven superintendents said the full entitlement should be paid during the school year in which the expenses are incurred. Fifty said either that all payments should be made earlier or that the first payment should be made earlier. Some of the other recommendations were (1) entitlements should be paid before October 1, (2) the school district should be allowed to claim in September at least 50 percent of the previous year's eligibility, (3) payments should be made quarterly, (4) payments should be made on fixed dates, and (5) pay up to 90 percent of entitlement upon completion of the application. Several said the Bureau of the Budget should not be allowed to hold up payments.

Many superintendents felt that the membership survey was too much of a burden on the parents. Some said that many parents refuse to cooperate at all, that they feel the questions asked are an invasion of privacy. This means that in some districts federally connected ADA are significantly undercounted, thus lowering their potential entitlement. This problem is especially bad in large cities. The respondent from New York City said that in 1967-68 only 48 percent of the survey forms were returned. There were many suggestions on how the student survey could be simplified or eliminated. Fifteen suggested that the information be obtained when the child enrolls in school. The count could then be taken from the school records. Twelve more suggested that the information be gotten from the federal installations where the parents of the children are employed. Several suggested that the student survey be made only once every three years or every two years and that the same percentage of eligible students to total ADA be used for three (two) years. Several said there should be only one survey form per family instead of a form for each child. Some said that as long as federally connected parents live in a district, one form should be sufficient, they should not have to keep filling them out. One said that a base year should be established and from that point only additions and deletions to the list of eligible students should be counted. Another thought that foster parents or guardians should count. Another suggested that federally connected employees be determined from the Internal Revenue Service and the money be allocated to the states for distribution.

A few volunteered the comment that the P. L. 874 program was well administered. Several added that the state representative was very helpful with their application. Most of the others commenting on this subject were dissatisfied with the administration of the program. They said that the forms were too complicated and should be simplified. They felt there is too much paperwork involved in making an application. Some said that the formula is too hard to understand. Others said that better instructions for filling an application are needed. Some thought much of the information could be provided to the Office of Education by the state department of education. Some said that they had problems finding districts that were comparable to them. Some thought the program was not publicized enough. One superintendent in Illinois claimed that he had been eligible for several years before he found out about the program. There were complaints that the visits by HEW representatives to check student surveys cause delays and are not necessary. It was also said that different field representatives use different criteria in checking the surveys. Ten thought impact aid funds should be distributed by the state representative.

Many superintendents liked the minimum of "red tape" that goes with the receipt of impact aid money. They felt that it is the best of all federal aid programs because it is non-categorical aid. They can put the money where it is most needed in their educational program and they feel that they are best qualified to do this. Some one hundred and forty-five superintendents stressed how important impact aid is to the survival of their school system. Many said they depended heavily on the receipt of impact funds and that, if P.L. 874 were eliminated, it would work a hardship on the local taxpayers. Some said that the legal limits on property taxes would not allow them to raise enough money locally to continue their present educational program without impact aid. Twenty-three said that if P. L. 874 were eliminated they would probably be forced to close. Many more said that receipt of P.L. 874 funds allowed them to provide a good education to all of the children in their district. A school superintendent of a predominantly Indian school district in the Southwest describes his situation as follows: "ABC school district* with Indian allotted land has an extremely low tax base, 87 percent dilapidated housing, and two completely deteriorated business communities with no industry in the school district. (It is a) Mining town but the mining of lead and zinc has historically become only a memory. The area of the school district is 16 square miles. We are ghetto rural style. Federal funds have equalized our educational situation to make our school average in our area (below national average) in facilities, supplies, and teachers salaries. Without the present level of federal assistance we could not operate. Low income area, low tax base (20 percent adequate), greater needs from our students because of the low depressing poverty economic base. The 1967-69 levels of financing 874 will allow us to operate at minimum levels educationally. Kids need more educational opportunities in this type of environment."

There were many other problems mentioned. In school districts located near military bases, the continual transferring in and out of military personnel was said to cause increased costs because the children must go through a readjustment period when they enter a new school. It was pointed out that because military people come and go they don't take much interest in the community. This causes problems in operating schools for these people. Further, it was stated that military people do very little to support the local economy, not only by their failure to pay property taxes but also because they can buy things on the military base without paying sales taxes. In some states money from sales taxes goes towards education.

Several pointed out severe problems associated with Indians. These school districts usually have large portions of their land taken up by Indian reservations, thus they have a very low tax base. Further, they claim that there are many problems involved with educating these children as they are generally from economically deprived areas. There is often extra money required for transportation as they are usually very spread out geographically.

Many comments were made by those who thought they were being undercompensated by impact aid payments. Ninety-one superintendents said that they should be paid on the actual cost to them for each federally connected student in average daily attendance. Another twenty-seven said that the entitlement should be based on the current year. Twenty-six superintendents said that students residing in low rent public housing should be included in P. L. 874 because little taxes could be collected from the place of residence of the parents and further that these students usually cost more to educate because they are from economically deprived homes. Ten others felt that children of federal employees who work on land which is leased by the federal government create as big a burden as other federally connected pupils and should be included with the 3(b)'s. Six said that it was unfair not to count employees working in the Post Office.

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*The name of the school district has been omitted.

Many people expressed concern about 3(b) students. They stressed the fact that the place of work of their parents was not being taxed and that they caused a definite burden on the school district. Twelve felt that they should be paid more than 50 percent of the rate for 3(a) pupils. Some said that if the 3(b)'s were eliminated they hoped that it would be phased out over a period of several years so that the burden would not be felt all at once. Six persons said that 3(b) payments are not justified. One of these in Oregon said, "There is absolutely NO LEGITIMATE BASIS* for the payment of such funds to school districts when the people involved who are working on federal projects are taxpaying homeowners of the district. When there is indeed a FEDERAL IMPACT because of an influx of kids because of federal activity in the area or when the federal properties are not providing property tax revenues, there is some basis. Both in (ABC) school district and here, the money keeps coming years and years after there is any basis for it. WHAT THE HELL! Why not have similar payments for kids of state employees – county employers – school district employers – mosquito control district employers? We will continue to apply for it as long as the "handout" exists from the GREAT WHITE FATHER and the application process is not onerous."

Eight people said there should be no distinction between 3(b) "ins" and 3(b) "outs". Two people said that 3b "outs" should not be dropped from the program. Other suggestions for who should be counted and paid for under P. L. 874 included:

(1) Students whose parents work on federal property and live in trailer camps (they should get more than 50 percent of the local contribution rate because trailer camps don't bring in much tax money)

(2) Students of parents employed on activities which surround the federal installation which would not be there if it were not for the federal installation

(3) Adults in junior colleges

(4) Civilian personnel temporarily assigned to a federal installation throughout the country or world whose families remain in the district

(5) Students who live in one district but go to school in another should be counted in the district where they go to school

(6) Children of embassy officials in Washington, D. C.

(7) Children of officials in New York and children of foreign consulates.

Forty-six superintendents thought that federal property should be assessed and the federal government should pay taxes on their property like other property owners.

Thirteen superintendents felt that impact aid should be eliminated and be replaced by federal aid to education. A superintendent in Massachusetts expressed this view as follows: "The entire 874 program is the greatest misuse of public funds for education that has ever been dreamed up. It is a very undemocratic manner of distributing federal funds. It is nothing more than pork-barrel legislation! Why not establish education as a national priority instead of connecting it with federal activities or the military. Then attempt to remove the educational burden off the individual home owner. And, the rationalization that 874 is better than nothing is pure nonsense!"

Sixteen others felt that payment under P. L. 874 should be determined by the school district's ability to pay – school districts with low assessed valuation of taxable property should get a higher payment rate. Many others felt that higher payments should be given to those who make a bigger local tax effort.

Thirty-five said that payments should be based on average daily membership rather than average daily attendance. They pointed out that they have to have a teacher and space for the child whether he is present or not.

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*Emphasis in original.

Several felt that comparable districts should be eliminated. They say that basing payments on this method overpays some and underpays others. Some recommended that all payments be based on the national average per pupil expenditures. One said that payments should be made based only on state groupings.

Five said that the states should not be allowed to reduce state aid because of impact payments. One said that adjustments should be made for states providing a large part of current expenses.

One superintendent thought that the percent of federally connected pupils required for qualifying for P. L. 874 should be raised, two others thought it should be lowered. One said that large districts should be required to have only 100 federally connected pupils or 6 percent federal connection in order to qualify. Another said that payments should be made only for an increase in enrollment caused by the federal government.

Several superintendents recommended formulas which were based on the burden to the school district caused by the federal government. One said payment should be the net revenue loss from tax exempt federal property and added school costs resulting from such properties. Several said that the amount of money raised by local taxes, state aid, federal income, and any other income should be subtracted from the cost per student. The difference is the federal obligation. One said that the difference between the amount received per pupil from the state and the state average cost per pupil should be paid.

One superintendent felt that the exclusion of pre-Kindergarten pupils is inequitable. Another argued that the inclusion of grades 13 and 14 in some states and not others is discriminatory and not equitable. One cautioned that with any formula "care must be taken to prevent small, unorganized districts from using this source of funds to resist consolidation, reorganization or other measures designed to provide quality education."

If P. L. 874 is not fully funded, some felt priority should be given to Section 2. One felt priority should go to districts with the highest percentages of federally connected students. Another felt priority should go to districts with the highest percentages of disadvantaged children.

Two superintendents felt that the percentage "loss of real property" needed to qualify for Section 2 of P. L. 874 should be reduced. One said that the Section 2 payment should be made on the basis of total millage voted by the district. Another said compensation should include any bond obligations which were on the land taken by the federal government. One superintendent said, "The required annual visit by a representative of HEW to check all districts before receiving payment under Section 2 is expensive, delaying, and not necessary. Once the district has been visited and the facts ascertained, additional claim made by the district could be certified by the local taxing authority. Administration and payments made under Section 2 has been poorly administrated."

There were a few superintendents who were very provoked by the Battelle questionnaire. Several of them felt they should be reimbursed for the time it took them to fill out the questionnaire. Three said that the money spent on the study should have gone to the local districts. One of these said, "I have one very strong reaction. I would like to have seen the money being "wasted" on this survey distributed directly to the districts. I must answer at least three or four surveys of this type every month. I'm getting tired of doing it, as you can plainly see. What the districts in California need is more money, not more surveys."

Comments on P. L. 815

There were a number of comments about P. L. 815. Table A.2 shows a summary of these comments. A large portion of these, one hundred and thirteen, were related to problems with the present formula or problems in qualifying for aid under the current formula. There were also a large number of problems which are caused because of the lag in funding of P. L. 815. There were many comments about the way the program is administered, state participation in administering the program, and recommended changes to the formula. There were fifty-three giving reasons why they had not applied for P. L. 815 funds even though they thought they would qualify. There were also a few comments complaining about the federal requirements and a small number praising the present P. L. 815 program.

TABLE A.2. SUMMARY OF COMMENTS ABOUT P.L. 815

Type of Comment	Number of Comments
Related to lag in funding	99
Administration of 815	74
Problems with present formula	113
Recommended changes to formula	62
Reasons for not applying	53
State participation	53
Federal requirements	14
Praise of 815	10
Total	478

Source: Questionnaire for Recipients of School Assistance to Federally Affected Areas.

Forty-three superintendents said that P. L. 815 should be fully funded. Seventeen said that by the time the payments were made on past projects the initial entitlement for which they had qualified was not large enough to cover the current construction costs or that their building needs had increased and they had to do more building. Another twenty-nine said there were too many delays in getting their money and the lag caused many problems. One superintendent commenting on the problem of funding said, "It is ridiculous to recognize a need and responsibility by a law and then fail to "fund" this program, or to "fund" it two years after the pupils enroll and housing becomes inadequate". One superintendent said that if a project is approved and the money has been appropriated by Congress, the Bureau of the Budget should not be permitted to withhold these funds. Another said that often a community is promised P. L. 815 money and receives part of it. The community goes ahead and begins the project. Then the money doesn't come and the local district is stuck paying for the whole project. Two said that if the original allocation did not cover the cost of a project, the local district should be given enough money to complete the project. Three said that if 815 was not fully funded that every district should receive part of their entitlement rather than forming priorities and giving money to only a few districts.

Only seven superintendents volunteered a comment that P. L. 815 is well administered. Three thought the field representative was very helpful. Seventeen thought that there is too much paperwork involved. Seven thought that the money should be distributed by the state representatives. Four thought that the field representative should have more authority in administering the program. There were many claims that projects were held up by the federal government. "They were slow in declaring eligibility, they were slow in sending information about the states of the applications, they were slow in getting information and funds to the local districts, they were slow in making audits, and they were slow in approving building plans." Some pointed out that it was a waste of time to have building plans approved by both the state and federal governments. One said that all program planning and building construction should be left up to the state and local districts.

Six superintendents said the federal government caused excessive delays in getting bids for equipment because of government regulations and checking. Two complained about the federal regulations on wage scales which resulted in higher construction costs. One superintendent wanted to purchase mobile classrooms because he knew the federal impact would be only temporary but said federal regulations under P. L. 815 would not allow this. He therefore had to spend more money than was necessary. One superintendent said, "Some federal requirements caused unnecessary expense, wasted time, and accomplished nothing". Three superintendents claimed that problems arose because of differences in federal and state requirements.

There were many who thought it is too hard to qualify for aid under the present formula and there is too much red tape. Two said they have more federally connected pupils than non-federally connected pupils and they had never received any P. L. 815 assistance. One pointed out that "the percent restrictions in a given year do not take into account a consistently steady increase over a period of years which can in the long run cause the same construction problems for a district". Another said, "The policy that allows payment only one time on a child is not realistic. The same child who is in elementary school grows to need a junior and senior high school". A number felt that if they were eligible for P. L. 874 funds they should also be eligible for P. L. 815.

There were many complaints about the present formula: It does not allow them to build the type of building they need to support their educational needs. They feel that they are capable of knowing the type of building they need. It does not allow them to plan ahead. It discriminates against those who make a local effort. If they build on their own, they no longer have unhoused pupils and therefore are no longer eligible. It does not pay for the replacement of obsolete and unsafe buildings. P. L. 815 funds underpay because they are based on minimum school facilities and many feel minimum school facilities are not adequate. Some would like to have fewer pupils per classroom than minimum facilities allow. In regard to this, one superintendent said, "The formula that determines the capacity arbitrarily by the number of square feet in a classroom without considering the school's program, is unrealistic. For instance, if you have 15 fifth graders in a classroom that could hold 30, and 45 sixth graders in a classroom designed for 30, it is unrealistic to say that you have adequate housing because there is room for 15 of the sixth graders in the fifth grade room. The bodies may fit, but the educational needs of the students would not be provided for".

There were many suggested changes in the formula. Some said the required percentage increase in federally connected pupils should be lowered. Others said there should be no required increase in the non-federally connected students. Several said the payments should be based on the current cost of construction. Many said that payments should be based on the number of federally connected pupils in the district, not on a percentage increase. Some said that capital costs should be added to operating expenses. Some thought that a longer projection of membership into the future should be allowed. One said, "The requirement that children be unhoused before qualifying for P. L. 815 condemns a school to perpetual crowded conditions that are not educationally desirable. A school should be allowed to build for future enrollments when they are certain". Some said that 3(b) pupils should be paid 100 percent instead of 50 percent of costs.

There were a number of reasons given for not applying for P. L. 815 funds by people who knew they were eligible. Nineteen said they knew there was not enough money available or that they would be low on the priority list. Eleven more had not applied because it was too difficult to qualify. They said they did not have sufficient staff to process the papers and meet the deadlines. Six said they had not applied because of the lag in time. They said they need schools now and could not wait. Seven had not applied because the amount they would have received would not have covered the increased costs which would be caused by the federal requirements. Some said the amount of money involved was not worth the effort. Four said they had not applied because they did not understand the requirements. One said he had not applied because he was not bonded to capacity. One said he had not applied because the field representative has too much authority in determining eligibility, building size, type of construction, use of buildings, and contents of buildings. Two said they had not applied because the Corp of Engineers provided additional school facilities. And one said that he thought he could get more money by waiting, since he thought his peak increase in federally connected students would be at a later date.

Only a few volunteered praise for P. L. 815. Two said the amount paid was equitable. Two said 815 money was a big help. Two more said they would have had to close if they had not received it. Four said 815 was a good program.

The Battelle Recommendation in Relation to the Comments

The Battelle recommendations differ substantially from the comments of the superintendents, particularly in the method recommended to determine the number of students for whom entitlements will be paid. Because the recommended method would pay many districts less than what they now receive, the recommended method is inconsistent with the preferences of superintendents who believe that the current program does not pay them enough.

On the other hand, the other aspects of the recommended program are quite responsive to the comments of the superintendents. In the case of P. L. 815 the recommended program would solve practically all of the problems discussed above by altering P. L. 815 to conform to the principles of P. L. 874. In the case of P. L. 874 the situation is more complex. The primary problems cited were those of timing of payments and uncertainty - both of which stem from the disagreements over the appropriate size of the program between the Executive Branch and the Congress. If the recommended program is accepted by both the Executive Branch and the Congress, it would solve the problems of uncertainty and timing, but if it is not, its existence may simply add fuel to an already flaming controversy.

(159)

BUDGET BUREAU NO: 51-S69011
APPROVAL EXPIRES: 10-30-69

Battelle Memorial Institute · COLUMBUS LABORATORIES

505 KING AVENUE COLUMBUS, OHIO 43201 · AREA CODE 614, TELEPHONE 299-3151 · CABLE ADDRESS: BATMIN

QUESTIONNAIRE FOR RECIPIENTS OF SCHOOL ASSISTANCE TO FEDERALLY AFFECTED AREAS (SAFA)

Your cooperation in filling out this questionnaire and returning it promptly is necessary to make sure that Battelle's study of the impacted areas program (referred to as SAFA in this questionnaire) fully reflects the importance of the program to your school system and your views on the program. If you have questions about the questionnaire, please call Miss L. Brown at Battelle (614-299-3151, Extension 3304).

You will find it helpful in answering these questions to have available a copy of your application for SAFA funds for Fiscal Year 1968 (July 1, 1967, through June 30, 1968) and a financial statement for your school system for the fiscal year closest to the 1967-1968 school year, showing your various sources of revenues. For some of you, this will be a fiscal year beginning in the fall of 1967 and ending in the fall of 1968; for others it will be a fiscal year starting in July, 1967, and ending in June, 1968. If your financial records are on only a calendar year basis, use your calendar 1967 financial records. If you have both fiscal year and calendar year data, please use the fiscal year data. Please use this financial data in answering questions calling for the 1967-1968 school year information.

To minimize data-processing costs, please record your answers on the lines provided to the right of the questions. Place only one number on each line. The position of the decimal point or commas for numerical answers has been indicated in the answer space. The small numbers below many answer lines are for Battelle's data-processing purposes only.

IDENTIFICATION

(Enter only those items not shown, or shown incorrectly, on the label above.)

Name of school system ____________________

Name of person filling out questionnaire ____________________

Position of person filling out questionnaire ____________________

Address of local school system ____________________

____________ City ____________ State ____________ Zip Code

Telephone number of person filling out questionnaire ____________ Area Code ____________ Number ____________ Extension

QE FORM 4474

PART 1: GENERAL INFORMATION ABOUT YOUR SCHOOL SYSTEM

1. What type of community does your school system serve? (Enter one number from list below which most closely describes your community on the line at right. If your school system has the same boundaries as a county, please use either (9) or (10) below.) _ _ 7

Large Urban Area (metropolitan population over 2,000,000)
    (1) Central city, (2) Urban fringe (between city and suburbs), (3) Suburban
Medium Urban Area (metropolitan population 200,000 to 2,000,000)
    (4) Central city, (5) Suburban, (6) Mixed suburban and rural
(7) Small Urban Area (metropolitan population under 200,000)
(8) Primarily Rural Area
(9) County unit, primarily urban
(10) County unit, primarily rural
(11) Other (specify) ________________________________

2. Indicate the range of grades taught in your system.

Enter number of lowest grade taught (Use "0" for kindergarten) _ _ 9

Enter number of highest grade (Use "14" for two year junior college) _ _ 11

NOTE: In answering this and other questions please make sure you use the far right-hand box, that is for a system starting with the first grade enter _ 1, not 1 .

3. Indicate your estimate of the proportion of your non-Federally connected employed parents whose jobs are within the boundaries of your school system. A suburban system will likely have few parents working within school system boundaries; a central city system will have a much larger percentage. (Enter appropriate category number at right.)
(1) Less than 25%, (2) 25% to 50%, (3) 50% to 75%, (4) More than 75% _ 13

4. What proportion of your property tax base (assessed valuation of taxable property) would you estimate is residential property? (Please give best estimate even if you are not certain.) about _ _ _ % 14

5. What is the number of full time equivalent students per full time equivalent classroom teachers in your system (1967-1968 school year)? _ _ . _ 17

6. What is your competitive position in teacher salaries? Most systems in your area offer salaries: (Enter appropriate number at right.)
(1) Higher than yours, (2) About the same, (3) Lower than yours _ 20

PART 2: FINANCIAL INFORMATION ABOUT YOUR SCHOOL SYSTEM

(Please remember to enter your answers so that the last figure you enter is on the far right-hand line.)

7. What was your school property tax rate (in mills per dollar or dollars per thousand dollars of assessed value) applicable for the tax year most closely corresponding to the 1967-68 school year, or calendar 1967 if your tax year is on a calendar year basis? NOTE: If your school system is fiscally dependent (i.e., a branch of some other level of government without taxing powers of its own), enter the rate of special or earmarked* taxes, if any, below and enter the number "1" on the line at right. _ 21

Rate (mills) for current operating expenses. _ _ . _ _ 22 25

Rate (mills) for other (specify) ____________ _ _ . _ _ 26 29

---

*By "Earmarked" taxes we mean those designated before they are received for education purposes specifically.

8. What was your property tax base (assessed valuation of taxable property) in 1967? (To the nearest dollar) $_ _,_ _ _,_ _ _,_ _ _,_ _ _. 30 43

9. What is your estimate of your local assessment ratio (the ratio of tax valuation to sales or market price)?

(Even if you cannot answer the first two items please answer the third – even if the answer is a rough approximation.)

For residential property _ _ _ % 44

For non-residential property _ _ _ % 47

For all property combined _ _ _ % 50

10. For the 1967-1968 school year or your most comparable fiscal year (see instructions on page 1) what was the total revenue received by your school system from:

Your School System's Own Taxes

School property taxes $_ _ _,_ _ _,_ _ _. 53 61

School income taxes $_ _ _,_ _ _,_ _ _. 62 70

School sales taxes $_ _ _,_ _ _,_ _ _. 71 79 80(1)

Other school taxes $_ _ _,_ _ _,_ _ _. 7 15

Other Local Sources

Appropriations Received from Local Governmental Units (e.g., city or county) $_ _ _,_ _ _,_ _ _. 16 24

Distribution of County Income Taxes $_ _ _,_ _ _,_ _ _. 25 33

Other local tax distributions to your school system (Where your system levies at a fixed rate, e.g. 25 mills, include in "school system's own taxes" above, but if, for example, you get some fixed percentage of receipts from a particular tax like a license or cigarette tax include the amount here) $_ _ _,_ _ _,_ _ _. 34 42

Other school system receipts (tuition, transportation fees, gifts, rents, earnings from investments (net, not gross), proceeds from lunch and milk programs, etc. $_ _ _,_ _ _,_ _ _. 43 51

Revenue from State Sources (including federal money received through the state, where the federal portion cannot be separately identified) $_ _ _,_ _ _,_ _ _. 52 60

Revenue from Federal Sources

ESEA Title I $_ _,_ _ _,_ _ _. 61 68

SAFA (impacted areas) $_ _,_ _ _,_ _ _. 69 76 80(2)

Other federal programs $_ _,_ _ _,_ _ _. 7 14

Other Sources (other school districts, etc.) $_ _,_ _ _,_ _ _. 15 22

TOTAL REVENUE $_,_ _ _,_ _ _,_ _ _. 23 32

NOTE: These financial breakdowns are comparable (with minor exceptions) to those used in Office of Education Handbook I, "Financial Accounting for Local and State School Systems". Any difficulties in categorizing revenues can be resolved by consulting that Handbook or calling Battelle at the number given on the first page of this questionnaire.

11. What were your total current operating expenditures for the 1967-1968 school year? (Include Administration, Instruction, Attendance, Health, and Pupil Transportation Services, Operation of Plant, Maintenance of Plant and Fixed Charges -- Handbook II Reference Account Numbers 100, 200, 300, 400, 500, 600, 700, and 800 Series.) $_,_ _ _,_ _ _,_ _ _. 33 42

PART 3: LOW-RENT PUBLIC HOUSING

12. Have you any enrolled students who reside in Federally financed low-rent public housing? (1) Yes, (2) No, (3) Don't know of any (Enter number of answer at right.) _ 43

13. If you know about how many of your enrolled students reside in such low-rent public housing, enter the number at right. _ _ _,_ _ _. 44 49

14. In the last three years did your school system participate in any phase of planning of new low-rent public housing projects? If yes, please enter "1" on the line at right and describe the participation briefly in the comments page at the end of the questionnaire. If no, please enter "2" at right. _ 50

15. Did your school system receive any "payments in lieu of taxes" related to low-rent public-housing projects during the 1967-68 school year? Enter "1" if yes, and record the amount on the second line at the right; enter "2" if no; enter "3" if you don't know. _ 51

$_ _ _,_ _ _. 52 57

PART 4: QUESTIONS RELATING TO PARTICIPATION IN IMPACTED-AREAS PROGRAM (SAFA)

16. Indicate the section(s) of SAFA legislation under which you received fiscal 1968 funds. [Mark "1" on appropriate line(s)]

P.L. 815 (building assistance)	_ 58
P.L. 874, Section 2 (reduction of tax base)	_ 59
P.L. 874, Section 3 (c) (1) (regular program)	_ 60
P.L. 874, Section 3 (c) (4) (hardship cases with more than 50% of pupils on Federal property)	_ 61
P.L. 874, Section 4 (sudden increases in attendance)	_ 62
P.L. 874, Section 3 (e) (unanticipated decrease in Federal impact)	_ 63

17. Indicate the method elected for determining rate of P.L. 874 payment for Fiscal 1968. (Enter appropriate number at right)
    (1) 50% of the state average per pupil expenditure, (2) 50% of the national average per pupil expenditure, (3) Based on state groupings, (4) Individually selected comparable districts

_
64

18. Indicate the payment rate used in calculating your P.L. 874 entitlement for Fiscal 1968. (To the nearest dollar)

$_ _ _.
65

19. Indicate the average daily attendance for the 1967-68 school year by the following classes: (Use last SAFA application count for 1967-68)

Non-Federally connected children	_,_ _ _,_ _ _	68–74	80(1)
"3a" (live and work on Federal property)	_ _,_ _ _	7–11	
"3b1" (reside on Federal property)	_ _,_ _ _	12–16	
"3b2" (parent works on Federal property)	_ _,_ _ _	17–21	
Total of all students	_,_ _ _,_ _ _	22–28	

20. Indicate your estimate of the proportion of your "3b2" students whose parents are employed on Federal properties which are located outside the boundaries of your school system. (Enter appropriate number at right)
    (1) Less than 25%, (2) 25 to 50%, (3) 50 to 75%, (4) 75 to 98%, (5) Over 98%.

_
29

(NOTE: Most of you, particularly in smaller districts, will be able to make an accurate estimate without special effort. In systems without Federal installations the answer is 100%. Larger systems may have to estimate this percentage on the basis of a review of the results of the student survey, combined with knowledge of whether major installations are located within the system.)

21. Does your school system make special arrangements contingent upon receipt of SAFA funds (for example, an increase in teacher salaries if you receive a SAFA entitlement)? If yes, enter "1" at right; if no, enter "2". Please describe any such arrangement in the comments section at the end of the questionnaire.

_
30

22. If for some reason you received only half the SAFA funds you were entitled to in 1968-1969 (and knew two years in advance that you would only get half your entitlement), what action(s) would you have had to take? (Enter "1" on each line that applies.)

None	_	31
Pay less for salaries	_	32
Reduce Hiring	_	33
Borrow money	_	34
Defer maintenance	_	35
Cut supply purchases	_	36
Increase taxes	_	37
Other (specify at left)	_	38

23. If for some reason your SAFA payments for 1968-1969 were double your expected entitlement (and you knew two years in advance that this would happen), what would you be likely to do with the extra money? (Enter "1" on each line that applies.)

Nothing ___ 39

Reduce taxes (or increase them less) ___ 40

Increase salaries ___ 41

Increase supplies and materials purchases ___ 42

Hire additional teachers ___ 43

Reduce Borrowing ___ 44

Start new special programs ___ 45

Other (Specify at left) ___ 46

PART 5: SAFA ADMINISTRATION AND POLICY

24. How well does the current SAFA formula compensate your agency for the burdens caused by the Federal Government? (Assume that full entitlements are paid.) (Enter proper number at right.)
(1) Overcompensates, (2) Adequately compensates, (3) Undercompensates ___ 47

25. Can you suggest changes that you think should be made in the current PL 874 payment formula? Enter "1" if yes and describe changes in comments section below; enter "2" if no. ___ 48

26. Do you believe there are alternative and equally effective ways to determine entitlements other than the current methods of counting Federally connected pupils each year? Enter "1" if yes and describe changes in comments section below; enter "2" if no. ___ 49

27. Some school systems find the timing of SAFA payments to be a problem. What is the greatest amount of your present entitlement you would be willing to give up if you could receive your full payment by October of each fiscal year? Express your answer as a percentage. ___ ___% 50

28. In general, how would you describe your attitude toward the current SAFA program? (Enter appropriate number at right)
(1) Highly satisfied with program, (2) Satisfied with program, (3) Neutral, or no opinion, (4) Dissatisfied with program, (5) Highly dissatisfied with program. ___ 52

29. What is your opinion about the role that your State should play in the administration of the SAFA program? (Enter appropriate number on line at right)
(1) State should not be involved at all, (2) State should be involved, but not as much as it is now, (3) Present State role is about right, (4) State should be involved more. ___ 53

30. Do you think the present P.L. 815 (building assistance) eligibility provisions make it too difficult to qualify for assistance? (Enter appropriate number at right.) Please do not consider the disaster assistance provisions of P.L. 815 in making your answer.
(1) Too difficult to qualify, (2) Qualification requirements are about right.
(3) Too easy to qualify ___ 54

31. If, to the best of your knowledge, your school system has ever qualified for P.L. 815 (nondisaster) assistance, please enter "1" at right; if not enter "2" at right. If you can suggest a formula for P.L. 815 entitlements that you consider more equitable than the current formula, please describe it in the comments section. _ 55

32. If you ever believed that you were likely to be eligible for P.L. 815 assistance, but for some reason did not apply, please enter "1" on the line at right and explain the circumstances in the comments section; otherwise enter "2". _ 56

33. If for some reason Congress did not appropriate enough funds for P.L. 874 to pay all entitlements of all districts, please indicate at right the number of the priorities system you would consider most equitable: (1) give priority to the school systems that get a high percentage of their total budgets from SAFA, (2) give priority to payments based on 3(a) students who live, and whose parents work, on Federal property, (3) reduce each system's entitlement by the same percentage, (4) give priority to the school systems with the lowest per-pupil tax base, (5) no opinion, or (6) other (specify in comments section). _ 57

34. During its study Battelle will be making visits to many school systems and phone calls to others to discuss experiences with the SAFA program and the burdens imposed by Federal activity on school systems. If you have special problems and/or opinions you would like to express to a Battelle representative, please indicate at right:

    Yes, please arrange a visit if you can (Enter "1" at right); Yes, please call if you can. (Enter "2" at right). _ 58

Naturally, with the limited time available for this study it will not be possible to consult individually with each of approximately 4,000 recipients. However, Battelle will try to contact most of the districts indicating a desire to discuss SAFA further. Also, some districts will be contacted, even without an indication above, in order to ensure that the field interviews cover a representative sample of school systems and special problem areas. If there is a special reason why you would like to see a field interview in your area, please indicate it on the comments sheet. 80(4)

Please check back over your answers to see that you have answered all questions and that your numerical entries end in the far right-hand position. This is necessary because the Battelle computer that will process these forms is not very intelligent (though it is very efficient). For example, if you have school property taxes of $100,000 and answer our question 10 with $ 1,0 0 0,0 0 instead of $ _ _ _, 1 0 0 , 0 0 0 our computer will conclude that you are collecting $1,000,000. Also please make sure you have only entered one number per line.

PART 6: COMMENTS

Please use this section to elaborate upon any of your earlier answers and for any detailed answers to the questions in Parts 4 and 5. Indicate the question number to which each of your comments relates. Also use this section for any comments on SAFA you want to make which are not covered by specific questions in this questionnaire.

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QUESTIONS APPLICABLE ONLY TO RECIPIENTS OF P.L. 815 (excluding disaster assistance)

If you have never received assistance under P.L. 815 (building assistance) or if you have received P.L. 815 assistance only under the disaster relief portion of that legislation, you may discard this page of the questionnaire. If you have received P.L. 815 (nondisaster provisions), please complete the questions below and return this sheet with the main questionnaire.

1. For your most recent P.L. 815 assistance, what role did the Federal Government play in your project? (Enter appropriate number at right)

   Program Determinations: (1) Interfered too much, (2) Helped just enough, (3) Did not help enough ___ 59

   Construction Services: (1) Interfered too much, (2) Helped just enough, (3) Did not help enough ___ 60

   If you answered (1) or (3), please elaborate in the comments section below.

2. For your most recent P.L. 815 assistance, what role did the state play in your project? (Enter appropriate number at right)

   (1) Interfered too much, (2) Helped just enough, (3) Did not help enough, (4) Did not participate ___ 61

   If you answered (1), (2), or (3) above, please elaborate in the comments section below.

3. How did the funds paid under P.L. 815 (assuming full entitlements were paid) compensate you for the burden imposed by Federal installations? (Enter appropriate number at right)

   (1) Overcompensated, (2) Adequately compensated, (3) Undercompensated, (4) No opinion ___ 62

4. Can you recommend changes in the way P.L. 815 is administered?

   If "yes", enter "1" at right and specify under comments below. ___ 63 80

COMMENTS

If you have additional comments or suggestions which you believe Battelle should consider relative to P.L. 815, please specify here. Continue on the back of this sheet, if necessary.

APPENDIX B: SOME TECHNICAL ISSUES IN A FORMULA THAT USES TAX RATE AND TAX BASE TO DETERMINE PAYMENTS

The purpose of this appendix is to consider technical issues that affect the implementation of the program recommended in the report. These technical issues primarily concern the use of tax rate and tax base for property taxes in the formula. By comparison to the problems of dealing with property taxes, income, sales and other taxes used by school districts present little problem. Those taxes are levied against a tax base that is comparable from district to district within the same state. This situation does not obtain in the case of property taxes.

To make property taxation workable, a system must establish an identifiable value for each parcel of taxable property within each taxing jurisdiction. This task, called assessment, is accomplished in various ways in the United States, depending upon the type of property involved and the differing state laws and local practices that are used. Most property is assessed by a local official often functioning at the level of the county. This official generally operates within a series of guidelines established by state constitutions, state laws and, in some cases, by state administrative bodies such as equalization boards.

The assessor places a valuation on each property in the taxing jurisdiction. This value is generally recorded in tax record books (called "digests", "lists", or "duplicates" depending upon the state) for each taxing jurisdiction. The sum of all assessed values can thus be calculated for any school district or muncipal or county government that operates schools. With this assessed value measure available, it is tempting to utilize it (as many states do) in school aid formulas to indicate relative wealth of districts or, in the impact aid case, as an indirect measure of the economic stimulus of federal activities.

In using such a measure, however, it is necessary to take into account a variety of situations that affect the use of assessed value. These are described below.

Differences Between Assessed Value and Tax Base

Significant quantities of property are not reached by property taxation. Generally the properties of the federal government, state governments, municipalities, schools, churches and not-for-profit foundations and social agencies are not taxed. In addition, some states provide special property tax exemptions related to the property of industrial taxpayers used for pollution control purposes, or pursuant to concessions made to attract new industry. Other states allow special exemptions for the homes of elderly persons and some states provide rather sizeable homestead exemptions. The value of tax exempt property is by no means trivial; in many major American cities tax exempt property is as much as 25 percent of the value of all property.

Tax exempt property would present no problem if assessment procedures simply ignored the properties concerned, thereby keeping the value of such property out of the assessed value figures. However, assessments in many states include such property even though it is not taxed. Moreover, some tax exemption devices take the form of excusing a tax liability rather than not establishing such liability in the first instance. Where this is done a tax is actually calculated upon the property. As a result assessed value data in some jurisdictions fail to reflect accurately the actual tax base of a community.

In general, this problem is handled by existing state procedures. Some states exclude tax exempt property from their estimates of assessed value. Other states include such property but create another set of figures to represent the assessed value of taxable property. In any formula utilizing assessed value it is important to so define assessed value that the figures used relate only to property upon which tax is assessed and collected.

Differing Assessment Ratios

Assessed value data provide a perfectly accurate indication of the tax rate that would be required to provide any given level of local educational revenue. However, they do not provide an accurate

(169)

indication of "real" tax rates required to produce a given level of local revenues. The reason for this is the persistence of differences in assessment ratios throughout the United States. The significance of the assessment ratio is best understood by an example.

District A has an assessed value per pupil of $15,000 and levies a tax of 1 percent (10 mills) against this base to produce a revenue per pupil of $150 annually. District B has an assessed value per pupil of $7,500 and levies a tax of 2 percent against this base to produce a revenue per pupil of $150 annually. The tax rate in District B appears twice as high as in A, but may not be.

In District A, property may be assessed at 50 percent of true value. Thus the true value of that district's tax base per pupil is $30,000. In District B, property may be assessed at 25 percent of true value. Thus the true value of that district's tax base is also $30,000. The real effort required in A to reach $150 per pupil is exactly that required in B. A house with a true value of $25,000 in District A would be assessed for tax purposes at $12,500 and taxed at 1 percent making the tax $125. The identical house in District B would be assessed at $6,250 and taxed at 2 percent also making the tax $125. Obviously in this circumstance a formula that considered District A as having more tax base than District B would produce unintended results.

Wide variations in assessment ratios (the ratio of the total assessed value in a jurisdiction to the total true value, expressed as a percentage rather than a ratio) are common in the United States. Separate assessment officials in various local governments have created the opportunity for these differences to arise. Motive is provided by at least three factors. First, in states with maximum tax rates set by state statute or constitutions an assessor can cut the effective tax rate (at the expense of public services) simply by keeping the assessment ratio low. Second, in states with state assessed utility property the effect of low local assessment ratios is to increase the percentage of total taxes paid by owners of state-assessed property. Third, in states with state aid formulas that try to equalize, the lower the apparent assessed value the higher the state aid. Assessors may achieve low assessment ratios passively, simply by failing to reassess to keep valuation consistent with price increases. The result of these factors is that in some states the assessment ratios may vary as much as 5 to 1 from the highest ratio district to the lowest.

These differences in assessment ratios persist in many states despite the fact that a uniform assessment ratio may be prescribed by state law.

Fortunately, states have a strong interest in either equalizing assessment ratios, or in finding out the differences in assessment ratios among districts. That motivation arises from three factors. First, some states actually levy property taxes and their revenues are reduced by local underassessment. Second, the public utilities that are state-assessed have a strong interest in ensuring that local assessment ratios are comparable to the ratios used in assessing public utility property. Third, states that have either a minimum tax rate requirement for state aid distributions or that distribute state aid upon a formula utilizing assessed value have a need to translate actual assessed values to equalized assessed values that permit proper operation of state aid formulas.

As a result, most states maintain data on assessment ratios in the various taxing jurisdictions. These studies are normally conducted by a state revenue authority pursuant to legislation requiring such an authority either to (1) seek to equalize assessment ratios throughout a state or (2) simply to conduct such studies so that assessed valuation and tax rate comparisons may be made among the state's jurisdictions. The existence of such studies is key to the equitable operation of any federal (or state) education assistance formula that incorporates assessed value per pupil.

In the administration of such a formula, the federal government would have to rely upon the states to certify either assessment ratios or equalized assessed value estimates for each of the districts to receive impact aid funds, and to certify some type of state average equalized assessed value per pupil. To determine whether the states could, in fact, provide such data, Battelle has contacted the education and/or tax officials in almost all of the states. In a few cases these state officials indicated that the state had a strong equalization board that, in fact, has caused equal assessment ratios throughout the state. In all other cases state data was found to be available. In most states this information is already being used by the state either in connection with its state education aid formula or to implement court orders or administrative decisions requiring equalization of assessment ratios throughout the state.

The Sales-Ratio Study

Before using such data in a federal school aid formula, it is important to understand how it is developed. The basic method for developing assessment ratio information is the sales-ratio study. This method takes a sample of recent transactions involving real property and ascertains the selling price.* The selling price is taken to be indicative of the true value of the property and the assessed value of the property is simply compared to that price. Another approach to the problem of comparing assessment ratios is simply to take comparable properties (e.g., frame, three bedrooms, one bath, no garage, no basement single family houses near small towns) and compare the assessed value of such properties in various jurisdictions in a state. Still another approach is to make actual appraisals of property and compare the appraised value to the assessed value. These methods are by no means perfect, but tend to provide a reasonable approximation of local assessment practices.

Despite its difficulties, equalized assessed value commends itself for utilization in a formula because (1) its use has already been tested for education fund distributions by many states, (2) it is widely accepted as a reasonable indicator of financial capability and (3) nothing better is available for measuring tax capacity and an imperfect (but good) measure is clearly superior to no measure at all.

Problems With National Averages

A distribution formula for impact aid that utilized national rather than state average tax base data would offer a number of potential advantages. However, this national average tax base approach was not used in the discussions of options for payment formulas for the technical reasons outlined below.

Flexibility. Using state averages of assessed valuation per pupil can be developed to permit the states to incorporate other measures of fiscal capacity, so long as they are reasonably related to the actual tax system in use in that state. For example, in states using significant sales or income tax revenues to finance schools (as is the case in those Eastern seaboard states with dependent school districts) the states could be allowed to develop a measure that included sales tax base (an easily established figure for each taxing jurisdiction) and income tax base (also easily established) as well as the property tax base. This flexibility could not be accommodated within a national average framework.

Equity. Use of a national average would create a number of inequities. These would arise where a state as a matter of policy adopts a change in tax policy that does not affect taxpaying capacity (which is what we are trying to measure with assessed value) but does affect assessed value. Two examples can indicate the problem. Florida chooses to exempt from taxation a significant portion of the valuation of owner-occupied dwellings. To achieve any given level of revenue this means that Florida must have a higher tax rate, but this higher rate is not an indication of lack of taxpaying capacity, merely a reflection of Florida's decisions on how to allocate property taxpaying responsibilities among its citizens. In some states public utilities are taxed heavily upon property through high assessment ratios on utility property (and thus a tendency toward high assessed value in the state) and in other states public utilities are reached through other forms of taxation.

Lack of Fiscal Neutrality. If a national-average assessed value were utilized as part of an impact aid formula, states would be given an incentive to alter their tax structures in order to increase entitlements of districts within the state. To take a simple change, a state that had state-assessed public utility property could convert its public utility taxes from a local tax to a state tax. The proceeds of this tax could then be remitted from the state to the individual districts in relation to the property of the utilities in the district and the district's effective tax rate. This transaction would take the assessed value of utilities out of the tax base of the districts receiving impact aid and make their situation appear worse vis-a-vis a national average. Adoption of homestead exemptions and similar policies could have comparable results.

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*The federal documentary tax on real estate transfers was based upon the value of the property being transferred. Thus, even though the selling price might not be revealed by local records (e.g., deeds and mortgages) it could be calculated with reasonable accuracy from the documentary tax stamps. With the repeal of this federal excise many (but not all) states have picked up a comparable tax or required recording of price information.

Perverse Results. States adopt a number of taxing policies that have significant impacts upon assessed value per pupil. The effect of these policies is uniform throughout a state and thus they do not seriously affect a formula using state averages. However, in a formula using national averages they would become significant. An example is the taxation of motor vehicles. Some states tax motor vehicles through a personal property tax, thus making these vehicles a part of the states assessed value. Other states rely primarily upon high license fees, in which case the value of vehicles would not be found in the assessed value figures of districts within the state. Also state procedures differ significantly in their treatment of industrial personal property (machinery and equipment as well as inventories).

For these reasons, the formula recommended for impact aid does not utilize a national tax-base concept, but instead relates its tax-base calculations to state situations.

(172)

APPENDIX C: SAMPLE APPLICATION FORMS AND INFORMATION ON THE COSTS AND ADMINISTRATION OF THE RECOMMENDED PROGRAM

Program Costs

Readers of this report will have noted that the discussion of various aspects of the formula for making impact aid payments did not include a separate discussion of the federal budget implications of many of the individual changes considered. This omission was intentional – it reflects the fact that Battelle sought to develop a program to meet as accurately as possible the economic burdens that federal activities place on schools. The costs of such a program were thus not relevant to its design.

Naturally, school officials in districts affected by the recommendations will wish to consider the impact of the recommended program on their own district. To provide a mechanism for this analysis a sample application form for the new program is included in this appendix.

In considering whether to adopt this program, federal officials will be interested in such factors as its total cost, the distribution of funds among states and even Congressional districts and other aspects that would affect the political acceptability of the recommended program. In addition, the relationship of the changes in impact aid entitlements to the funds that might be made available for schools under some other federal program may be considered to be relevant by these decision makers. To provide a basis for considering such questions, Battelle has developed a working paper that indicates the data most relevant to the analysis of alternatives to the approach we have recommended and shows rough approximations of entitlements to various districts and states under the recommended program.*

The total costs of the recommended program will depend in part upon several factors on which complete data are not available. The first unknown is the extent to which student counts will be reduced by the exclusion of certain government-owned, contractor-operated facilities from the program. Because not all such facilities would be eliminated from the program, but in those cases where the tax payments, in-lieu payments and comparable revenues to the school district exceeded the costs associated with the children of parents working on them, these facilities would not be claimed as federal property by applicant districts. Thus, calculating the costs of the recommended program with great precision would require determining the taxes paid by such facilities.

A second unknown is the extent to which the federal government would be able to limit its capital-cost contribution because either (1) districts do not have capital expenditures because of filling requirements through previous construction financed on a current basis or (2) the federal government has already provided more than its share of capital facilities.

A third unknown is the degree to which transition assistance would be provided to those districts that would receive less under the proposed program than under the current program. This situation is discussed in Chapter 10.

A fourth unknown depends entirely upon the process by which it is assumed that the recommended program would be adopted. If it were introduced in January of 1970 and there was a general understanding on the part of P. L. 874 recipients that it likely would be enacted, then districts would in many cases adjust their fiscal 1971 (school year 1970-71) spending and taxing decisions based upon the new program. If, on the other hand, districts assumed that such a program would not be enacted, those that maintain low tax rates because of high federal payments would find that they would get very low payments under the proposed new program which calculates entitlements in part on the basis of local tax rates.

Two other factors are unknown but controllable. They are the amounts that would actually be spent by the Commissioner under a "special hardship" provision in the recommended program (which corresponds to similar provisions in existing law) and the amounts of any prepayments of capital contributions.

It should also be noted that program costs are particularly sensitive to certain parameters in the formula which Battelle has suggested are not entirely ones that can be resolved by research. The most significant of these are the method for determining national minimum payments and the point at which the ratio of a district's assessed value per pupil to the state average assessed value per pupil is permitted to cause the district to be ineligible for assistance. On the assumption that these parameters are likely to be set through the political rather than the research process Battelle has not devoted major attention to estimating the costs of a program using the parameters it has included in the recommended program.

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*Battelle's contract with the Office of Education did not call for extensive information of this type.

Despite these caveats, and assuming the type of transition provision discussed in Chapter 10, we estimate that the cost of the recommended program in fiscal 1971 would be not more than $400 million. This estimate is based primarily upon a nonquantified judgment based upon our working familiarity with the type of formula being recommended and the financial characteristics of the over 4,000 districts that receive assistance under the current program.

The costs of the recommended program in future years would primarily be sensitive to the increasing per pupil costs of elementary and secondary education and any significant change in federal employment levels. In general, entitlements would tend to rise slightly less rapidly than per-pupil cost increases, if state aid expands its share of total educational costs. Any increase in federal support for elementary and secondary education would, to the extent that it reduced local tax efforts that otherwise would have to be made, tend to reduce the costs of impact aid.

The recommended program contains a number of provisions that would tend to reduce its cost over time. For example, the fact that state minimum payments would not be made on the contract districts (with federal equivalent students representing over half of total students) will tend to encourage consolidation of these districts in states that defray a high percentage of education costs through state aid. By consolidation with districts with a lighter federal impact, the districts would drop out of contract status and into status where the regular payment rate (including the minimum payment) would be in effect. Likewise, by providing special provisions for the phase out of the Section 6 schools and to permit guarantees of entitlements in the case of consolidations of certain heavily impacted districts, the program will encourage some consolidation. These factors, coupled with the national trend toward consolidation, tend to reduce the costs of impact aid because the absorption concept increases the number of pupils to be absorbed as the percentage of non-federal pupils in a district grows. This effect is reasonable as the prospects that both the benefits as well as the burdens of federal installations will be found together increases with the size of the district.

Under the current program consolidation has a tendency to increase entitlements by increasing the chances that districts that do not meet the 3 percent eligibility requirement will be able to meet the minimum requirement of 400 federally connected pupils.

Because sharp increases in military personnel usually represent increases primarily among the groups that are unlikely to have children in school (e.g., draftees), a significant reduction in the program resulting from a phase-down of the Vietnam War can be anticipated only to the extent that civilian employees would be laid off as a result. A general reduction in military manning levels would have some effect upon total entitlements, particularly in areas where bases might be closed. However, if the military departments act to keep their on-base housing occupied before turning to the private housing market, a reduction in military manning levels would not reduce the number of (a) pupils by a significant margin, but would have an impact on the (b) pupils.

Increased civilian employment of the federal government is likely to have little effect upon the costs of the recommended program unless it happens to be concentrated outside of major metropolitan areas.

By comparison to the recommended program a continuation of the current P. L. 874 program would tend to have slightly higher percentage increases in cost (and of course a higher base cost). In the long run, however, the current P. L. 815 program would probably cost less than the proposed program, assuming that no legislative changes are made.

When one considers the prospects for potential future changes in the legislation, the contrasts between the recommended program and the present program are quite striking. The present program has, for the reasons explained in Chapter 1 of this report, tended to be expanded periodically to encompass more districts and more types of presumed federal impact. While the legislation does not provide a perfect vehicle for achievement of more general education assistance principles it is both a popular and a convenient one. Thus, Congress acted in 1969 to incorporate public housing pupils into the impact aid program. The next evolution, which like public housing amendments tends to aid many large cities, could be to include postal employees in P. L. 874. Another extension would be to include the employees of defense contractors, whether or not the contractor happened to operate out of a government-owned facility. This report's conclusion that contractors using federal property pay substantial taxes to local schools could be used as a basis for controlling the payments of impact aid (as is recommended here) or

174

as a basis for broadening impact aid because of the inequity of not paying districts whose major government contractors happen to own their own plants.

A similar evolution could be expected in connection with P. L. 815 because over the next 10 years the limitations of that law as applied to heavily impacted districts will become even more apparent than they are now. If P. L. 815 is ever allowed to evolve into a program similar to P. L. 874, and P. L. 874 is broadened along the lines discussed above, P. L. 815 would become one of the major sources of school construction finance in the United States.

The differences between the present evolution of P. L. 874 and the concepts of the recommended program represent a choice for national decision makers. On the one hand they can decide to confine impact aid to those cases were the negative federal impacts are clear and substantial, as the recommended program does. Such a decision would force explicit consideration of other forms of federal financial aid for schools. On the other hand, they can allow P. L. 874 to continue its present evolution toward providing more and more assistance to more and more districts on the basis of federal impact, but in the process run the risk that the resulting program might continue to force major problems of uncertainty and less-than-full funding upon the heavily impacted districts.

Program Administration

Battelle's examination of the administration of P. L. 874 and P. L. 815 quickly lead to the conclusion that the many administrative problems of impact aid are primarily attributable to the legislation itself, rather than any lapses on the part of the Office of Education. The P. L. 815 administrative procedure is time consuming, expensive to operate and extremely complicated. This is more the result of the law itself than any failings in administering it. The P. L. 874 administration results in uncertainty about what amounts will be paid that causes chaos in school budgeting and extremely serious problems of late payments and uncertain timing of payments. These problems are caused primarily by the annual controversies over impact aid, the differences between Administration-recommended budgets and final budgets, and other factors beyond the control of those who administer the program.

The program recommended in this report would be relatively simple to administer by comparison to the current program. Initially, the program would require some one-time costs to establish new administrative procedures, write regulations, and to review forms indicating the past federal construction assistance to be used to determine the share of past capital costs to be assumed by the federal government.* As an on-going program, the recommended program would have many fewer applicant districts and would relieve the Office of Education of the need to review selections of comparable districts and state groupings.

IMPACT OF THE RECOMMENDED PROGRAM

This matrix compares the recommended program to the current program to show the impact of the changes recommended by Battelle on various types of districts. The baseline for comparison is a fiscal 1971 situation in which neither P. L. 874 nor P. L. 815 are changed in any major way; $20 million is provided for P. L. 815; $650 million or 90 percent of entitlements is provided under P. L. 874; and the public housing amendments to that legislation are not funded. This baseline was chosen as a likely result of continuing the present program (although there is obviously a significant probability that less than 90 percent of entitlements would be paid).

Each change is considered independent of the other changes.

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*The alternative is to let bygones be bygones and pay only on the basis of capital costs incurred after the enactment of the new legislation.

Proposed Change	Effect on Districts: Percentage of Equivalent Federal Students (All (a) students plus 0.4 times (b) students divided by ADA)			
	0-3	3-12	12-50	50% and Higher
New eligibility requirement of 3 percent relative impact	Out of program	No change	No change	No change
Absorption of 3 percent of non-federal ADA	Out of program	Entitlements sharply reduced	Entitlements reduced somewhat; the greater the relative impact, the lesser the reduction	Does not apply
Change payment rate for (b) pupils to 40 percent from 50 percent	This change reduces the payment for each (b) pupil from 90 percent (given the assumed less-than-full funding) to 80 percent in all districts having (b) pupils. The effect tends to be less significant in the heavily impacted districts, which tend to have a greater proportion of (a) pupils, and most significant in the lightly impacted districts.			Does not apply
Eliminate P. L. 815 and replace with capital contribution rate	Entitlements increase	Entitlements increase	Entitlements increase	Does not apply, but capital cost payments would increase
Eliminate comparables and match local tax rate times state average base, with no change in minimum rates	This change tends to increase entitlements in some districts and reduce them in others. In general, the movement to payment of current year costs increases entitlements by 10-15 percent, but use of local tax rates will decrease entitlements in low-effort districts and increase them in high tax-effort districts.			Does not apply
Pay national minimum rate to states rather than districts	This change will affect only districts that make a low tax effort, primarily those in states that defray a high percentage of educational costs from state funds.			Does not apply
Cut off richer districts (districts with 1.25 or more times state average tax base per pupil)	This change will tend to affect about 15 percent of entitlements and will normally be less significant in districts with 15 percent or more relative impact than in the others.			Does not apply – these are not high valuation per pupil districts
Make payments to heavily impacted districts necessary to provide reasonable standard of education	Does not apply	Does not apply	Does not apply	Entitlements higher than 90 percent payments under current program in most districts, except those now getting double benefits through state aid and impact aid
Difference between minimum per pupil payment and national minimum to be used by states for education	Provides funds earmarked for education for distribution to districts throughout the state, regardless of federal impact. Applies primarily to those states that already provide a high percentage of educational costs through state aid.			
Assumption that "savings" from impact aid program will be spent on another federal education program	Roughly half of the funds from any such program would be likely to return to the districts now receiving P. L. 874 funds, as those districts account for roughly half of all elementary and secondary enrollment in the United States. These payments would tend to be most significant in those large districts with light federal impact that would become ineligible for impact aid under the recommended program.			

Source: Battelle estimates.

The effects of the recommended changes on large cities and the various states are also significant. Because a large percentage of entitlements of the lightly impacted districts are accounted for by the nation's largest city districts, the changes proposed will most affect entitlements of these districts and the states in which they are found. However, these large cities and states are also those that would be major beneficiaries of any new program developed to utilize the "savings" from the impact aid recommendations. The light federal impact in these districts and states means that many of them would receive substantially more money from abolishing all impact aid and replacing it with a federal program distributing funds on the basis of ADA than they do from impact aid. Based upon 1967-68 data, cities such as New York, Los Angeles, Philadelphia, Detroit, and Baltimore would benefit from such a move. Such a move would also benefit such states as Illinois, Indiana, Louisiana, Minnesota, New York, North Carolina, Ohio, Pennsylvania, and Wisconsin that pay more than $5 million each over what they get back in assistance from impact aid. The recommended smaller impact program with the assumption that the savings are spent on another federal education program would also tend to benefit these states as they have large numbers of pupils but relatively small numbers of federal pupils.

The sample application form follows:

SAMPLE APPLICATION FORM FOR IMPACT AID FOR USE IN FISCAL 1971
(1970-1971 school year)

PART ONE: STUDENT COUNT (Note: Ultimate regulations would allow the states considerable flexibility in whether to use ADA or ADM and in selection of the count date. For purposes of this worksheet the use of ADA is suggested.)

1. Students living on federal property (Current 3(A) and 3(b) (1)) _______ pupils

2. Students not living on federal property but with parent working on federal property (a)_______________ multiply by 0.4 and enter at right (b) _______ pupils

3. EQUIVALENT FEDERAL STUDENTS (sum of above) _______ pupils

4. Non-federal students _______ pupils

5. Non-federal equivalent of federally connected students 2(a) above times 0.6 _______ pupils

6. EQUIVALENT NON-FEDERAL STUDENTS (sum of 4 and 5 above) _______ pupils

7. TOTAL STUDENTS (sum of 3 and 6) _______ pupils

8. Proportion equivalent federal students (line 3 divided by line 7) _______ pupils
If answer is less than 0.03, the local educational agency is not eligible for assistance. If answer is greater than 0.50 do not complete form. *

9. AVERAGE IMPACT FACTOR (0.03 times line 6) _______ pupils

10. ELIGIBLE EQUIVALENT FEDERAL STUDENTS (line 3 minus line 9) _______ pupils
If answer is less than 5, the local education agency is not eligible for assistance.
(In the student counts, use the same estimates as those for the current program, except exclude students whose parents work on federal property that returns greater revenue to the school district (through shared revenues, taxes on property in government-owned contractor operated plants, and in-lieu payments, etc.) than the district could receive by claiming such students. Do not include any students in grades 13 and 14.)

PART TWO: LOCAL CONTRIBUTION RATE (Note: the following format is designed specifically for the simple, but most common, case of school system whose local revenues come from a property tax. Regulations will prescribe how to make the calculations when the taxable year for property taxes overlaps the school year, as is the case when property taxes are levied on a calendar year basis and school accounting is on a fiscal year basis. Regulations will also deal with jurisdictions that have dependent school districts and no special earmarking of particular tax resources for schools. Basically this will be done by attributing to the school system the same share of each tax source as the share of total expenditures that are represented by school expenditures. Local educational agencies offering less than twelve grades will be attributed only a partial tax base, reflecting their share of total pupils, based upon state average relationships of school district expenditures for their grades to total school expenditures. For the purposes of making sample calculations information on state average tax base for any recent year will normally approximate the current relationships. After the program was initiated, more precise estimates would be made available by the state to applicant districts, or the states would actually make this portion of the calculations. **)

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*Payments for these districts will be negotiated by a method described in the text of this report.

**To readers unfamiliar with the use of tax base in state-aid formulas the local contribution and eligibility portions of this formula may seem complicated. However, formulas using tax base as an element are in effect in many states and have operated quite successfully and with low administrative costs.

1. **Estimate of state average tax base per pupil for 1970-71*** ________
   (If more than one tax is used make additional entries for other taxes)

2. **Applicant local educational agency tax rate for 1970-71***

   A. For operating expenses ________

   B. For capital expenditures and debt service ________
   (BEFORE ENTERING THIS RATE SEE SUPPLEMENTAL FORM 1)

   C. Total tax rate ________

3. **Amount per pupil that would be raised by the agency if it had state average per pupil tax base (1 times 2(C))** $ ________
   (Round to nearest whole dollar. If entry would be more than national average per pupil costs, or the applicants per-pupil costs in the preceding year, enter the lower of the two.)

PART THREE: CALCULATIONS OF ENTITLEMENT

1. **Multiply eligible equivalent federal students (Part One, item 10) by the local contribution rate (Part Two, item 3)** $ ________

2. **Alternative Calculation of Entitlement**

   A. Enter 1.25 times Part Two line 1 $ ________

   B. Enter per pupil tax base of your local agency (If line B is larger than line A, your agency is not eligible for impact aid.) $ ________

   C. Calculate what you would raise from local taxes if you have
   1.25 times state average tax base (Part Two, item 2(C))
   times B above $ ________ **per pupil**
   multiplied by your total pupils (Part One, 7) $ ________

   D. Calculate what you would receive if the entitlement in line 1 above were paid to you
   (1) Estimated impacted aid entitlement (line 1 above) $ ________/
   (2) Local taxes (multiply Part Two, 2C by assessed value in your LEA $ ________
   (3) Add (1) + (2) **TOTAL** $ ________

3. **If the amount shown in line D(3) is less than the amount shown in line (2)(C), your entitlement is the amount shown in line 1 of Part 3. If the amount shown on line D(3) is greater than that on line 2(C) your entitlement is line 2(C) minus line 2(D). Enter entitlement here** $ ________

PART FOUR: ADJUSTMENTS

(The final form under the recommended program would include provisions for upward and downward adjustments as a result of overpayments or underpayments in the preceding year and deductions for various federal payments in lieu of taxes, shared revenues and payments of other federal agencies as described in the text of this report.)

***For worksheet purposes, use a recent year for which data on state average assessed value per pupil is available and use the tax rate from the same year.**

PART FIVE: TO BE COMPLETED BY THE STATE OFFICE OF EDUCATION ONLY IF THE LOCAL CONTRIBUTION RATE (Part Two, line 3) IS LESS THAN ONE-HALF NATIONAL AVERAGE OF PER PUPIL COSTS

1. One-half national average per pupil costs estimates* $ ________.

2. Local contribution rate (Part Two, line 3) $ ________.

3. Difference (1 minus 2) $ ________.

4. (A) If the entitlement shown on Part three, line 3 is the same as the amount shown on Part Three, line 1, then enter the eligible federal students (Part One, line 10) ________ pupils and multiply by line 3 above $ ________.

   (B) If the entitlement shown on Part Three, line 3 is less than the amount shown on Part Three, line 1, then
   (1) Enter the entitlement $ ________
   (2) Enter the amount shown on Part Three, line 1 $ ________
   (3) Divide (1) above by (2) above ________
   (4) Enter eligible federal students (Part One, Line 10) ________ pupils
   (5) Multiply line (3) by line (4) ________ pupils
   (6) Multiply line (5) by line (3) of Part Five ("Difference") $ ________

The amount calculated in item 4 is the amount to be paid by the federal government to the state education agency in those states where the local contribution rate of a district is less than the national minimum rate.

SUPPLEMENTAL FORM 1

(Under the recommended program this form will provide for the counting of classrooms in use for the current year divided into two categories, those financed by the federal government and those not financed by the federal government. Regulations will prescribe the handling of situations involving cost-shared construction and the definition of classrooms in use.)

A. Classrooms constructed (1) with federal funds ________ rooms
(2) with non-federal funds ________ rooms
(3) Total ________ rooms

B. Percent federal responsibility for existing facilities
Part One line 10 divided by Part One line 7 = ______ x 100% = ______%

C. Percent federal construction
A(1) divided by A(3) = ______ x 100% = ______%

D. Unmet federal obligation (B minus C)
If C is larger than B enter zero ______%

E. Local contribution (100% minus C) ______%

F. Federal obligation for debt related to existing facilities.
(1) If line D is zero, enter zero here ______
(2) If line D is not zero, divide line D by line E and enter result. ______

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*In implementation of the program, this estimate would be provided by the Office of Education inclusive of both capital and operating costs. For those filling out the sample form based upon a past year – use the same year's data for this entry.

Applicants that do not claim federal payments based upon local capital costs need not fill out this form.

The entry on line F(2) indicates the proportion of capital costs in the current year based upon costs of construction of existing facilities that should be met by the federal government. That proportion should be applied only to the tax rate for past capital outlays (usually either for servicing of bonds or payments back to a state building fund), to indicate the tax rate to be considered in Part Two, line 2(b). To the rate calculated in this manner for all capital costs related to previously constructed facilities the district can add the full amount of any capital levies (or their equivalents) for buildings not in operation during the school year for which assistance is being requested and for all subsequent (after fiscal 1971) bond issues, building funds, rentals and rental-like payments to building authorities, etc.

This supplemental form would be filed only once by most districts. The districts that had had no federally financed construction would not need to fill it out at all. The districts that had already received federal construction funds that more than discharged federal obligations as determined through this form, would not be applying for capital contributions for past outlays and thus, would not need to complete the form. Once the past outlay responsibilities of the federal government were determined under this form, the federal government would continue to pay on that basis for all obligations incurred before the effective data of the legislation and to pay through the calculation indicated in Part Two of the regular form for all new capital outlays.

A Note on the Complexity of the Forms

Readers unfamiliar with the current application procedures for impact aid may have the feeling that the calculations required to apply for impact aid funds under the proposed program are complicated. Actually they compare reasonably to the present program.

The operating-cost calculations under the proposed new procedures are somewhat more complicated in the student count area and in the calculation of the ceiling entitlement than the current form. However, for most districts the local contribution rate formula, involving only two basic numbers – the district's own tax rate and the state average assessed value, is less complex than the procedures involving reporting the financial characteristics of a number of "comparable" school districts.

The capital-cost calculations will add complexity to the applications of those districts that do not now receive P. L. 815 but would receive capital cost support under the proposed program. Of course, such districts would not have to claim capital costs (and thus, fill out the forms) if they did not choose to do so. The capital cost calculations are much simpler than current P. L. 815 applications.